

# PUBLIC HEALTH REPORTS

VOL. 38

SEPTEMBER 21, 1923

No. 38

## VACCINATION TECHNIQUE AND CERTIFICATION.

An Experiment in Making Vaccination an Insurance Against Delay as Well as a Protection Against Disease.

By S. B. GRUBBS, Surgeon, United States Public Health Service.

Although vaccination against smallpox has been employed constantly by all civilized nations for 125 years, and has substituted an insignificant annoyance for one of mankind's greatest scourges, the manner of using vaccination and the technique followed vary greatly.

When we see the wide differences in methods that exist in different countries, we naturally attribute them to ignorance or lack of interest; but this is not always the case, as circumstances may vary so greatly that what is most expedient in one place may not serve in another.

At the New York Quarantine Station a method has been in use for nearly two years which seems successful; and it is here submitted in the hope that it may be of use to others, either in whole or in part. At quarantine we want to disturb commerce and annoy passengers as little as possible. We want, however, to stop smallpox at the water front, as, in this country, passengers and crews once released pass from the control of the Federal quarantine officers. We want also to vaccinate so that there will be no bad after effects, and we want to make vaccination a thing to be desired and not something to be avoided.

The procedure we wish to describe recognizes and makes use of the local reaction that follows vaccination. This is a well-known phenomenon observed at least in part by Jenner and studied extensively by Pirquet. With standard technique and proper virus, it is possible with this reaction to read the degree of immunity to smallpox possessed by the individual vaccinated. Since 1913 Force has advocated the use of this reaction, and much of our procedure is the result of his teaching. It was adapted to maritime quarantine by the writer first at the Panama Canal and later at New York.

The local disturbance or reaction following vaccination may appear within a few hours or not for several days. In general terms, the time of its appearance measures the person's resistance to smallpox; i. e., the earlier the reaction the greater the immunity; the later the reaction, the less the immunity. The early reactions are, as a rule,

slight, and the later reactions are more severe. Thus, persons previously unvaccinated will usually show no disturbance for three days or even longer, but the reaction will then go to a successful take. For purposes of record, three degrees of reaction are recognized; namely, immune reaction, vaccinoid, and successful vaccination; and further subdivisions, especially of the immune reaction, may be recorded, if desired, by a system of plus marks. No hard and fast line can be drawn, however, although we usually say that an immune reaction must appear before 48 hours.

As soon as we know that a person is immune to smallpox, we should be willing to release him entirely, knowing that he can not contract the disease and, hence, is not a danger to the community. As many who travel by sea are already immune as a result of previous vaccinations, this procedure reduces the period of their detention, if exposed, from 14 days to 2 days or less, and emphasizes the value of vaccination as a time-saving expedient. The old method of vaccinating exposed persons and holding them 14 days or until the vaccination "took," placed a premium upon nonvaccination, since a nonimmune person might get a "take" and be released in a few days. An immune person, on the other hand, who could have no successful vaccination was at a disadvantage and has often been detained 14 days, or prohibited from traveling, although he had protected himself and could be of no danger to the community.

It is much better to encourage vaccination by using it, not only to produce immunity but also to measure it, if present, and then to give to those who submit, certificates that mean something and that will insure the owners against delay from smallpox quarantine, regardless of exposure to the disease. Over a thousand certificates, based upon local reactions, have been issued at the New York Quarantine Station, mostly to sailors and travelers. These certificates are in the form of cards which can be carried in the pocket and, in addition to specifying the reaction obtained and, hence, the individual's immunity, they identify the bearer by description and by his signature. They are based upon a vaccination technique that is strictly uniform, the results of which are certified to by two medical officers, one of whom must be on the laboratory staff of the station. This last requirement is made because the laboratory has immediate charge of all vaccine and supervises and instructs the other officers in vaccination procedure. These certificates represent careful work and present evidence both of immunity and identity. Therefore, it is hoped that they will be honored by authorities generally, not only in the United States but in other countries, especially after they become better known. If they are generally accepted, those who travel by sea will seek vaccination and will value our certificates largely on account of the time they save.

We have but two methods of vaccination, and we require that one or the other be followed in every detail. Each of these methods has been used hundreds of times, and one or the other fills all of our requirements. Either is quickly done, causes little pain, gives slight chance of infection, affords a reasonable amount of immunity, and the reaction following can be easily read, especially when compared with the control that is always required.

Instructions issued to the medical officers of this station and now in force for more than a year are quoted below. The first three paragraphs of these instructions describe the two methods of vaccination. The fourth, fifth, and twelfth paragraphs tell how vaccination cards may be issued. The sixth to eleventh paragraphs describe the various reactions and set forth how they shall be read and recorded. The last three paragraphs refer to quarantine regulations and explain the procedure to be carried out with smallpox contacts of unknown immunity who may be in the incubation period of the disease. We are confident that whenever such contacts show an immune reaction within 48 hours (at least two plus) they will not contract the disease and, therefore, may be released. If the reaction occurs after 48 hours, however, it shows the immunity is not complete and that smallpox may develop, probably in a mild form but dangerous to others. These persons must be held 10 days after vaccination. Full 14 days are not required, as, at the end of 10 days, after vaccination giving a reaction, there will be sufficient immunity from the vaccination just done to prevent the development of smallpox.

NOTE 1: For our purposes the needle method is preferred, but Force and Leake consider the drill method better adapted for the accurate reading of immune reactions using calipers when necessary to measure the areola. It is always possible at quarantine to discard doubtful reactions and revaccinate.

NOTE 2: Certificate given should be intelligible to the bearer; hence "successful vaccination" is used in the popular sense. An immune reaction or vaccinoid is, of course, successful to effect release from quarantine.

NOTE 3: Strictly speaking, a vaccinoid is a reaction with its maximum after 48 to 72 hours, but before the ninth day. Some of the cases certified as "immune reaction" may therefore go on to an accelerated reaction or vaccinoid, with maximum as late as the eighth day; but these cases for quarantine purposes may be regarded as immune, since the virus used is potent and would cause adequate reimmunization if the original immunity had dropped somewhat below the point where the maximum of the reaction would be shown in 48 hours.

## PROCEDURE FOR VACCINATION AGAINST SMALLPOX.

*Method of performing vaccination.*—The skin of the upper arm, in the region of the depression formed by the insertion of the deltoid muscle, should be thoroughly cleansed with acetone or nondenatured alcohol on gauze or cotton and allowed to dry. The underside of the arm is grasped with the vaccinator's left hand in order to stretch the skin, and three single, parallel scratches are made with the point of a sterile needle. These scratches should be three-fourths of an inch long and 1 inch apart. The scratch should penetrate the epidermis but not draw blood.

Virus of known potency and unexpired date will be used. Push an unbroken capillary tube of such vaccine through the neck of the small rubber bulb provided in the vaccination outfit until about half of the capillary tube appears beyond the bulb. Break the tip, which has been pushed through, and withdraw the bulb until the broken end lies in the neck of the bulb. With sterile gauze break the other tip of the capillary tube and drop the contents on the two outside scratches, leaving the middle scratch as a control. With a sterile toothpick gently, but thoroughly, rub the vaccine into the two outside abrasions and taking a fresh toothpick manipulate the middle scratch in a similar manner, but without vaccine. Allow to dry in the air at least five minutes, but do not expose to sunlight. Apply no dressing.

The drill method of vaccination is also approved. This is as follows: The epidermis is perforated by a small drill with a sharp cutting edge 2 mm. in width. The drill is made of carbon steel, and the tip can be sterilized without affecting the temper of the cutting edge. The skin is tightly drawn, and the drill, which is held between the thumb and second finger with the first finger resting on its end, is pressed against it perpendicularly. A single rotary turn is then made, without altering the pressure, exposing a circle of derma but causing no bleeding. Three abrasions should be made, 1 inch apart. The virus is dropped on two of the abraded spots and rubbed in with a sterilized toothpick as in the needle method. [See Note 1.]

At the time of vaccination, certain entries shall be made on the vaccination cards in duplicate. A record of manufacturer and laboratory number of vaccine shall also be kept. The following form shall be used for card certificates [see Note 2]:

SERIAL NO. .....	
<b>U. S. PUBLIC HEALTH SERVICE.</b>	
NEW YORK QUARANTINE STATION, ROSEBANK, STATEN ISLAND, N. Y.	
CERTIFICATE OF VACCINATION AGAINST SMALLPOX.	
NAME.....	SEX.....
AGE..... DATE OF VACCINATION.....	
HEIGHT..... DATE OF REACTION.....	
RESULT: <input type="checkbox"/> IMMUNE REACTION. <input type="checkbox"/> VACCINOID. <input type="checkbox"/> SUCCESSFUL VACCINATION.	
..... Signature.	Signed..... Medical Officer in Charge.

\* The cards must be completely filled out, including the signature of the vaccinated person, at the time the reaction is read. All entries must be made in ink; indelible pencil shall not be used. In case the vaccinated person can not write his name, but one card shall be made out, to be kept at the station for the purpose of record, and a

notation made on the card that the person can not sign his name. Ordinarily, cards will not be made out except for persons who have been vaccinated by medical officers on duty at this station who have been carefully instructed in the station procedure of performing vaccinations. However, special arrangements may be made, from time to time, to accept the results of vaccinations performed by physicians off the station, and to issue cards in accordance with the results observed by ourselves, provided the station technique has been used in every particular.

The procedure for recording the results of vaccination shall be as follows: In order that cards may be issued, vaccination shall be observed within 48 hours after being made. Preferably, examine at the end of 12, 24, 36, and 48 hours. If this is not possible, try to see patient after about 24 hours and again in 48 hours. If no evidence of reaction to vaccination be observed at the end of 48 hours in a person who has been exposed to smallpox, revaccinate every 24 hours for 3 consecutive days, using new virus and observing the person daily for 10 days from the first vaccination. After failure to produce a reaction in a person showing a good vaccination scar, observe every two hours after third vaccination, if possible. Readings, in all cases, must be made by two medical officers on duty at this station, one of whom shall be attached to the laboratory. These officers must agree if the card is to be issued and the card must bear the initials of both officers prior to the signature by the medical officer in charge. The results shall be recorded according to whether the reaction falls into one of the following classes:

1. Immune reaction.
2. Vaccinoid.
3. Successful vaccination.

1. *Immune reaction*.—Where the immunity of an individual is high, either from a previous vaccination or from an attack of smallpox, a subsequent attempt at vaccination usually results in a prompt sharp reaction which reaches its maximum in about 48 hours and may entirely disappear within 4 days. There is redness and swelling along the lines of incision which has received the vaccine as compared with the control. Vesicles rarely occur. The reactions may be divided into four grades, as indicated by "+", "++", "+++", and "++++."

"+" Reaction—One in which there is slightly more swelling and redness in the vaccination scratch than in the control.

"++" Reaction—A definite reaction as compared with control.

"+++" Reaction—Marked reaction as compared with control.

"++++" Reaction—Very well marked reaction as compared with control.

Reactions which do not make their first appearance within 48 hours will not be classed as immune reactions for the purpose of releasing persons from quarantine detention or for other purposes [see Note 3], nor will a "+" reaction be accepted either for release or issue of certificate. Reactions must be definite. In recording immune reactions, record the grade of reaction on one card only, issuing the duplicate which shall not indicate the grade of reaction.

2. *Vaccinoid* (accelerated and modified vaccination).—Appears after 48 hours. The papule occurs after two but frequently before five days have elapsed. The reaction is less severe and takes less time to run its course than a typical take. Vesicles frequent; pustules not always present.

3. *Successful vaccination*.—(Typical Jennerian vaccinia).—No reaction shown for three to five days. Vesiculation from fifth to seventh day with areola present; purulent, with well-marked areola about the eighth day.

Persons showing immune reactions (plus 2, 3, or 4), vaccinoid, or successful vaccination may be issued cards. In indicating on card whether reactions be immune, vaccinoid, or successful vaccination, completely obliterate with ink the two terms which do not apply.

*Issue of vaccination cards.*—The cards are now ready for entry in the record book, and they receive a serial number as entered. Record in book serial number, name, age, height, date vaccinated, date of reaction, variety of reaction, initials of observers, and remarks, giving manufacturer and laboratory number of virus used. The cards are now sealed with the official seal of the service in such way as to include the vaccinated person's signature and are signed by the medical officer in charge. The duplicate is then sent to the person concerned and the original filed alphabetically. The card shall be issued only if all information is complete in every respect. If the card is incomplete, as, for example, if the reaction has been observed by only one medical officer, place one card in file but do not issue the other. Passengers will not be issued cards except on request.

*Smallpox contacts.*—Paragraph 110 (B) of the quarantine regulations is as follows:

"All persons who, in the opinion of the quarantine officer, have been exposed to the infection shall be vaccinated, unless protected by a previous attack of smallpox, and detained in quarantine until the vaccination is protective against said exposure, or, if they refuse vaccination, detained in quarantine for 14 days after last exposure to the infection."

If smallpox has occurred during the voyage, contacts may be released when a satisfactory immune reaction (appearing within 48 hours) has been noted. If the reaction is a vaccinoid or successful vaccination (appearing after 48 hours), immunity will be considered established and the danger of smallpox obviated 10 days after the above-mentioned vaccination or fourteen days from the last possible exposure to smallpox.

If the exposure to smallpox was before sailing, and it is certain that no cases have occurred en route, contacts may be released as soon as a satisfactory immune reaction has been noted. In case a vaccinoid or successful vaccination develops, the suspect must be held to complete 14 days from date of sailing.

#### CONCLUSION.

1. By making use of the reactions that follow vaccination, it is possible to eliminate much of the delay now considered necessary to prevent the spread of smallpox.

2. In order to encourage vaccination, these reactions should be observed and records should be furnished the individual as a proof of his immunity.

3. A person certified as immune to smallpox should not be detained by any smallpox quarantine.

---

#### EFFECTIVE PUBLICITY IN RURAL HEALTH WORK.

An essential factor in the success of any public health or welfare program that involves educating the people, stimulating their interest, and enlisting their cooperation and support, is the proper presentation of the work in a manner that is easily understood and that, at the same time, compels attention. The use of the catechism or interview seems to inject into statements of fact and general information a personal element that renders such forms more effectual in securing and holding the attention of most people than the straight

narrative form. The article printed below <sup>1</sup> is reproduced here as a sample of newspaper publicity of the kind that is found exceedingly helpful in rural health work.

The work in Preston County, W. Va., here described is being carried on as a cooperative project in which the State board of health of West Virginia, the county health authorities, and the United States Public Health Service are participating. Dr. H. S. Mustard is field agent of the Public Health Service and health officer of Preston County.

#### BETTER HEALTH FOR PRESTON SCHOOL CHILDREN.

"Tell us something of your school work," we asked the health officer. "What are you doing in that line; what are your plans, and what spirit are you meeting on the part of parents?"

"All right. Let's go into the office," said Doctor Mustard.

We went in. It's on the second floor of the Herring Building, in Kingwood. We entered what appeared to be a business office, and a busy business office at that. It was just after 9 in the morning, and the health nurse was apparently getting ready to start on her rounds, rounds that we happen to know are frequently not completed until most of us have finished our 6 o'clock dinners.

"Miss Pugh," said the doctor, "get out some of our stuff on school work." Turning to us, he added: "Miss Pugh is the real brain of our work with school children. Come on into this room."

The second room we entered was totally unlike the first. It, too, was equipped for business, but business of a different sort. It bore the stamp of the medical world. On one side was a glistening white operating table; nearby an equally white enamelled instrument table. Toward the north windows was a laboratory desk, extending the width of the room, and upon it a microscope, chemical bottles, and the greatest imaginable array of what the doctor said were "stains for germs." Then, too, there was a "germ incubator," and sterilizers of various sorts.

"While we are waiting, would you like to see some diphtheria germs?" asked Doctor Mustard. Then he added with a smile: "They are guaranteed dead, but even if not dead, they couldn't fly."

So we peeked through the microscope, and asked the doctor for guidance. He took our place, shifted a few wheels which he said were "adjustments," and called us back. "Now look right in the center of the light space. See two dumb-bells, without enlarged ends, lying side by side? The deep coloring in each end gives the dumb-bell appearance. Those are diphtheria germs. A person who has had diphtheria is not turned loose on the public until discharges coming from his nose or throat fail to show those germs under the microscope."

"Seems simple enough," we conceded. "Makes it an exact science as to when they are safe to come out of quarantine, doesn't it?"

"You are right. And yet, to most people, if the recently diphtheria-stricken child appears well, it's conclusive proof that he is no longer a source of danger to others. Only about two weeks ago we had a diphtheria case that continued to show germs. The mother felt that it was all bosh, and that we were deriving some peculiar pleasure from keeping him in quarantine; and with this belief, she did not keep her other children away from him. Last week a second child in this family developed diphtheria, and a few days ago the third child took the disease. In spite of this, that mother probably feels that it was not the continuously germ-laden first case that gave

<sup>1</sup> From the Preston County Journal, June 14, 1923.

it to the others, but attributes it to clothes, or an ill wind, or 'something.' Here's Miss Pugh with the school stuff. I'll leave her to answer your questions; I must talk sanitary toilets to those men in the other room."

Miss Pugh came in with what the doctor called her "school stuff," and she didn't wait for us to ask questions.

"Here," she said, "is the individual record for each child examined. So far we have some thirty-four hundred records like this, and will have one for each school child in the county by the end of the year. The record shows height, weight, vision, hearing, tonsils, teeth, chest, skin, bones, joints, and so forth. It gives to us, at any time, a mental picture of each child examined."

"What use do you make of the record?" we asked.

"First," said the nurse, "we notify the parents of any defects found, and urge that they take the child to the family doctor, dentist, or specialist. In as many cases as possible I make a personal visit. But this is not enough. Parents are just people subject to the habit of procrastination, as are most human beings, and so we enlist the interest of the children."

"And how," we inquired, "do you do that?"

"Every man, woman, and child is interested in his or her weight, and many weigh on the slightest provocation. Weight, and especially the rate of gain in weight, is often a pretty good index of the health of a child, and it's a test that anyone can make, and make repeatedly. Each child examined is given a weight tag—pink for the normals, blue for the underweights. These cards not only state what the weight is, but what it should be for the age and height. On the back of the card are printed instructions on right living and how to bring the weight up to normal."

"Do the children take to this; do they show any interest in it?"

"Very much. But we don't stop there." She unfolded a chart. "This," she went on, "is a classroom record, to be placed in the schools next fall term. It contains the name of every child in the class. Opposite the name, and under the columns referring to weight, height, vision, teeth, and so forth, the child gets a red star for everything in which he is normal."

"Suppose he has a defect, say, in his teeth. How do you indicate that?" This school stuff was becoming interesting, and we wanted to know.

"In a way, we do not indicate it," said Miss Pugh; "we simply leave it blank. We don't want to do anything to cause the child embarrassment by this posted record. So rather than give a demerit for a defect, we give merits in the form of a red star for normal things; the child with the defect simply does not qualify for the red-star merit."

We felt that this was a good idea, and evidence that these health folks knew something about children. Then another thought struck us.

"Now, Miss Pugh, suppose a child had defective teeth and had the defects corrected; how would you give an indication of that on your chart; how would you show it so that he would obtain credit for a sound, clean, healthy mouth?"

"By giving him a blue star, under teeth, and opposite his name—where we had previously left a blank space. The blue star is really a greater credit than the red, because, while the red star indicates that things are normal, the blue star shows that something has been made good through effort. Any child with a complete line of stars, red or blue, becomes a 'Gold Star Specimen.'"

We became more interested; we became a little astonished at the far-reaching simplicity of the thing; and we became a little proud of Preston's school health possibilities. We wanted the whole story, so we asked:

"Anything else you do to insure physical corrections in these children?"

"There is a great deal more," answered Miss Pugh. And then she added, "We want you to get this straight. Neither Doctor Mustard nor I would give a rap for these records and charts if they didn't produce results. The examination and record are

only means to an end, the end of this phase of health work being the highest attainable degree of health for the greatest number of school children in Preston County. Clinics will be organized in various parts of the county, so that these defects, especially bad tonsils and adenoids, can be treated in the county by a specialist. That scheme is a cooperative one, the parents of the children treated forming a fund to pay some specialist in whom they have confidence."

"What about teeth defects?" A short time ago we had a talk with Doctor Mustard about "six-year molars."

"That," said Miss Pugh, bundling up her things and putting on her hat, "that is a hard question. We are shooping as many children as possible to the dentists; but that doesn't solve the problem. What we need is a dentist as a part of the health department; a dentist with a traveling equipment, who can visit every school, and, with parents' consent, fix up the school children right on the spot. That's what we need, and I only hope and pray that next year such a thing will be a reality in Preston County."

Everybody seemed busy, so we left the health department and went back to our newspaper office, thinking. It would be a great thing to have a school dentist; there's no denying that. And the untold good he could do! It would cost a little, but, on the other hand, it has and will cost lots more not to have one!

---

### SHIP-BORNE PLAGUE DURING 1922.

The following is a summary of plague infection on vessels as reported to the United States Public Health Service during the year 1922 (also December, 1921), and published in Public Health Reports.

Although these reports are probably not complete, they record a sufficient amount of ship-borne plague to emphasize the necessity for constant vigilance on the part of quarantine officers, the application of effective measures for the discovery and destruction of plague-infected rats on vessels, and the exercise of special precautions with vessels coming from or having visited plague-infected districts.

#### AUSTRALIA.

*Thursday Island quarantine.*—On December 31, 1921, the steamship *Tango Maru* arrived at Thursday Island quarantine, Queensland, from Kobe via Nagasaki, Hongkong, Manila, and Zamboanga, with a case of plague on board in the person of a third-class passenger who had boarded the vessel at Hongkong December 20, 1921, and reported sick December 22. The *Tango Maru* left Kobe December 13, 1921.

The steamship *Helcion* from Singapore, Straits Settlements, direct, arrived at Thursday Island quarantine December 1, 1922, with a case (Chinese fireman) of plague on board.

The steamship *Southgate*, which left Calcutta May 2 and Rangoon May 9, 1922, arrived at Thursday Island quarantine May 30, 1922, with a case of plague on board. The vessel was stated to be badly rat-infested.

## BRAZIL.

*Para*.—On February 3, 1922, one case of pneumonic plague was reported removed from the steamship *Polycarp* at Para, Brazil. The vessel was from Ceara, Brazil, via Manaos, Maranham, and Para, destined for New York.

## CUBA.

*Habana*.—One case of plague was reported November 11, 1922, on the steamship *Barcelona*, which arrived at Habana November 10 from Barcelona, Spain, October 13, via Alicante, Spain, October 17, and Las Palmas, Canary Islands, October 24. The patient was stated to have come from the Canary Islands.

## ENGLAND.

*Liverpool*.—Information dated February 21, 1922, reported the finding of 27 plague-infected rats and 1 plague-infected mouse on board the steamship *Warwickshire* at Liverpool, England. The vessel left Rangoon January 5, 1922, calling at ports as follows: Colombo, Ceylon, January 9; Suez and Port Said, Egypt, January 23; Marseille, France, January 29; Port of London, February 6, and Liverpool, February 12, 1922.

A plague-infected rat was reported found on the steamship *Elpenor* at Liverpool, April 29, 1922, and a plague-infected mouse was found on the same vessel during the week ended May 6, 1922. The vessel left New York December 17, 1921, arrived at Yokohama, January 25, 1922, from which port it proceeded to Kobe, Japan, arriving February 2; to Shanghai, arriving February 24; to Saigon, arriving March 1; to Singapore March 13, arriving at Genoa April 9; at Marseille April 12; and at Liverpool, April 22.

Four plague-infected rats from the steamship *Ardeola* were reported found at Liverpool in the latter part of June, 1922. The vessel arrived at Liverpool June 26, 1922, from the Canary Islands, having sailed from Las Palmas.

*Port of London*.—Steamship *Warwickshire*, Port of London, February 6, 1922. Twenty-seven plague-infected rats and 1 plague-infected mouse were reported found on the vessel after it had been fumigated at Liverpool, where it arrived from the Port of London, February 12, 1922.

The steamship *City of Genoa* arrived from Bombay, via Dunkirk and Hull, in April, having touched at Suez, Port Said, Gibraltar, and Plymouth. Eight cases of plague, three of which were fatal, occurred on board during the voyage. The first case occurred on March 7. The patient died and was buried at sea. The second case occurred on March 11, and was landed in Suez. The third and fourth cases

occurred on March 12 and were landed at Port Said. The fifth and sixth cases occurred on March 16 between Port Said and Gibraltar. Both died, and presumably were buried at sea. The seventh and eighth cases occurred on April 8, after the vessel had arrived at Plymouth on March 25. These cases were landed at Dunkirk on April 11. The vessel's quarters were disinfected at Suez and Port Said and the holds at Dunkirk. A complete and thorough fumigation, when the ship was empty, was carried out at Hull. Seventy-three rats were reported found dead at Hull after fumigation. Twenty-four dead rats were found during the discharge of cargo at Hull, previous to fumigation, and 23 were trapped alive.

The steamship *Porthia* left Rosario, Argentina, on October 24 and arrived in the Thames on November 25, with a cargo of grain in bag and bulk and a personnel of 33 men. A death had occurred November 21, which had been reported as enteric fever. Inquiry showed that the patient, taken ill on November 15, was in delirium almost from the first. A swelling on the right side of the neck appeared on the 18th and extended to the left side. Death took place without other signs on the 21st of November. Further investigation revealed the fact that dead rats had been removed from the top of the cargo in holds 1 and 4 on November 23, and that dead rats had been thrown out from the bunkers and elsewhere since leaving Rosario. Two ship's cats had been taken ill previous to the illness of the victim. One of these presented a swelling in the neck, which subsided; the other a swelling under the axilla. Both cats were thrown overboard. It was estimated that 50 dead rats had been found in the stokehold, bunkers, and hatches during the voyage. The total number of rats found during discharge of cargo and previous to fumigation was 92. The rats found during the discharge of the cargo were reported to be too badly putrified for satisfactory bacteriological examination. The vessel was fumigated at Gravesend, and subsequently at London.

#### EGYPT.

*Suez*.—The mail steamship *Dumbea*, from the Island of Mauritius, arrived at Suez, Egypt, August 5, 1922, with a case of plague on board. The patient, a French sailor, had been ill two days previous to arrival, and on August 4 presented symptoms suspicious of plague. He was landed at the Wells of Moses, and was declared positive for plague August 6. The vessel, which was destined for Marseille, passed the canal under quarantine, after disinfection.

*Suez and Port Said*.—Steamship *City of Genoa*, noted above.

#### FRANCE.

*Dunkirk*.—Steamship *City of Genoa*.

## GERMANY.

*Hamburg.*—The finding of plague-infected rats on the steamship *Legie*, from Buenos Aires, Argentina, was reported at Hamburg, Germany, July 29, 1922.

## ITALY.

*Messina.*—Under date of July 19, 1922, cases of plague were reported on a Greek vessel that arrived at Messina, Italy. The vessel was not allowed to enter.

## PHILIPPINE ISLANDS.

*Manila.*—A case of plague with fatal termination, occurring in a Chinese member of the crew of the steamship *Taisang*, from Amoy, China, was reported at Manila, P. I., June 1, 1922. The patient was taken acutely ill 36 hours after landing, June 1, at Manila. The vessel left Amoy direct for Manila, and was two and one-half days en route.

---

**CALIFORNIA LOCAL HEALTH DISTRICT LAW HELD VALID BY SUPERIOR COURT.**

The California law (ch. 571, act approved May 21, 1917) providing for the voluntary formation of local health districts, and under which the San Joaquin County health district was organized, has been held valid by the superior court of San Joaquin County. The decision holds that the county board of supervisors could levy and collect a special tax, as provided in the law, for the maintenance of the health district, but that the health district being a separate entity (even though, as in this instance, its boundaries may happen to be coextensive with those of the county), no funds raised by the county for strictly county purposes, including health work, could be expended for the benefit of the health district.

---

**DEATH RATES IN A GROUP OF INSURED PERSONS.****COMPARISON OF DEATH RATES FOR PRINCIPAL CAUSES OF DEATH, JUNE AND JULY, 1923, AND JULY AND YEAR, 1922.**

The accompanying table is taken from the Statistical Bulletin of the Metropolitan Life Insurance Company for August, 1923. It presents the mortality experience of the industrial insurance department of the company for the months of June and July, 1923, and for July and year, 1922. The rates for July, 1923, are based on a strength of over 14,000,000 insured persons.

Although the rate for July shows a seasonal decline from that for June, it remained slightly higher than the July rates for 1921 and 1922.

*Death rates (annual basis) for principal causes per 100,000 lives exposed, June and July, 1923, and July and year, 1922.*

Cause of death.	Death rate per 100,000 lives exposed.			
	July, 1923.	June, 1923.	July, 1922. <sup>1</sup>	Year 1922. <sup>1</sup>
Total, all causes.....	795.8	880.1	755.7	882.9
Typhoid fever.....	6.7	4.2	6.8	5.7
Measles.....	7.1	14.5	3.3	4.3
Scarlet fever.....	2.1	4.2	2.3	4.9
Whooping cough.....	4.8	4.1	2.1	2.6
Diphtheria.....	7.9	9.1	10.4	18.0
Influenza.....	4.5	11.9	3.9	21.7
Tuberculosis (all forms).....	107.8	121.3	105.2	114.2
Tuberculosis of respiratory system.....	96.6	110.5	94.9	103.6
Cancer.....	69.0	71.0	61.0	72.0
Diabetes mellitus.....	11.6	15.2	( <sup>2</sup> )	17.2
Cerebral hemorrhage.....	51.0	56.1	48.9	62.9
Organic diseases of heart.....	113.0	126.5	99.8	126.7
Pneumonia (all forms).....	33.3	55.3	29.3	73.7
Other respiratory diseases.....	9.8	12.5	10.7	13.7
Diarrhea and enteritis.....	17.6	10.1	14.0	10.8
Bright's disease (chronic nephritis).....	59.7	71.5	59.8	70.3
Puerperal state.....	17.6	17.7	15.2	19.0
Suicides.....	7.1	8.8	7.0	7.5
Homicides.....	6.9	6.4	5.6	6.3
Other external causes (excluding suicides and homicides).....	76.9	63.4	68.7	58.1
Traumatism by automobile.....	15.1	15.8	14.1	13.6
All other causes.....	181.4	196.1	198.8	173.3

<sup>1</sup> Provisional figures for 1922 given out previously have been revised on the basis of final tabulations of data on the lives exposed to risk.

<sup>2</sup> Not available.

## DEATHS DURING WEEK ENDED SEPTEMBER 8, 1923.

*Summary of information received by telegraph from industrial insurance companies for week ended September 8, 1923, and corresponding week of 1922. (From the Weekly Health Index, September 11, 1923, issued by the Bureau of the Census, Department of Commerce.)*

	Week ended Sept. 8, 1923.	Corresponding week, 1922.
Policies in force.....	53,927,062	49,933,345
Number of death claims.....	7,733	6,662
Death claims per 1,000 policies in force, annual rate.....	7.5	7.0

*Deaths from all causes in certain large cities of the United States during the week ended September 8, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, September 11, 1923, issued by the Bureau of the Census, Department of Commerce.)*

City.	Week ended Sept. 8, 1923.		Annual death rate per 1,000, corre- sponding week, 1922.	Deaths under 1 year.		Infant mor- tality rate, week ended Sept. 8, 1923. <sup>2</sup>
	Total deaths.	Death rate. <sup>1</sup>		Week ended Sept. 8, 1923.	Corre- sponding week, 1922.	
Total.....	5,852	10.6	10.4	950	868	.....
Akron, Ohio.....	20	5.0	6.0	6	11	71
Albany, N. Y. <sup>3</sup> .....	34	15.1	14.8	4	3	88
Atlanta, Ga.....	74	17.3	15.6	5	11	.....
Baltimore, Md. <sup>3</sup> .....	211	14.2	12.0	34	35	100
Birmingham, Ala.....	62	16.5	18.8	10	9	.....

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.

<sup>3</sup> Deaths for week ended Friday, Sept. 7, 1923.

Deaths from all causes in certain large cities of the United States during the week ended September 8, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, September 11, 1923, issued by the Bureau of the Census, Department of Commerce)—Continued.

City.	Week ended Sept. 8, 1923.		Annual death rate per 1,000, corresponding week, 1922.	Deaths under 1 year.		Infant mortality rate, week ended Sept. 8, 1923.
	Total deaths.	Death rate.		Week ended Sept. 8, 1923.	Corresponding week, 1922	
Boston, Mass.	138	9.3	11.3	19	33	54
Bridgeport, Conn.	28	10.2	7.6	3	6	41
Buffalo, N. Y.	112	10.9	13.6	22	35	92
Cambridge, Mass.	24	11.2	8.5	5	4	89
Camden, N. J. <sup>1</sup>	30	12.6	16.3	9	6	149
Chicago, Ill. <sup>1</sup>	510	9.2	10.1	94	92	84
Cincinnati, Ohio.	111	14.2	12.6	16	15	105
Cleveland, Ohio <sup>1</sup>	169	9.9	9.2	33	32	90
Columbus, Ohio.	74	14.8	13.2	12	9	125
Dallas, Tex.	24	7.1	12.4	2	4	82
Dayton, Ohio.	31	9.8	10.6	5	3	
Denver, Colo.	65	12.5	10.9	11	11	
Des Moines, Iowa	26	9.6		2		
Detroit, Mich.	224	11.7	8.4	63	31	126
Duluth, Minn.	9	4.4		1		23
Erie, Pa.	21	9.7	6.2	2	1	41
Fall River, Mass. <sup>1</sup>	30	12.9	15.5	11	11	156
Flint, Mich.	28	12.4		5		99
Fort Worth, Tex.	19	6.9	10.0	4	4	
Grand Rapids, Mich.	26	9.3	8.0	3	3	47
Houston, Tex.	35	11.8	10.1	3	3	
Indianapolis, Ind.	71	11.3	11.8	15	7	115
Jersey City, N. J.	40	8.3	11.8	12	13	80
Kansas City, Kans.	23	10.4	12.8	2	2	46
Los Angeles, Calif.	173	13.5	11.4	23	15	86
Louisville, Ky.	85	17.2	13.0	10	6	108
Lowell, Mass.	29	13.1	12.8	6	5	104
Lynn, Mass.	16	8.1		3		79
Memphis, Tenn.	37	11.3	17.7	5	5	
Milwaukee, Wis.	91	9.8	9.4	16	18	79
Minneapolis, Minn.	81	10.3	9.1	7	10	38
Nashville, Tenn. <sup>1</sup>	40	17.2	13.0	3	9	
New Bedford, Mass.	28	11.2	7.8	5	6	78
New Haven, Conn.	35	10.6	12.9	3	4	39
New Orleans, La.	124	16.0	16.0	13	19	
New York, N. Y.	1,049	9.2	8.9	180	156	72
Bronx Borough.	133	8.3	6.4	20	5	70
Brooklyn Borough.	354	8.6	8.6	69	61	73
Manhattan Borough.	453	10.4	9.9	75	72	73
Queens Borough.	78	7.6	8.2	11	13	59
Richmond Borough.	31	12.7	15.9	5	5	91
Newark, N. J.	85	10.1	7.6	9	12	42
Norfolk, Va.	25	8.2	10.4	4	2	71
Oakland, Calif.	39	8.5	9.2	4	5	51
Omaha, Nebr.	46	11.7	9.1	9	3	97
Paterson, N. J.	17	6.4	7.5	4	3	64
Philadelphia, Pa.	385	10.4	10.3	63	57	78
Pittsburgh, Pa.	160	13.6	10.0	24	18	83
Portland, Oreg.	51	9.7	10.1	2	3	20
Providence, R. I.	53	11.4	12.3	10	12	82
Richmond, Va.	48	13.8	11.7	7	10	86
Rochester, N. Y.	56	9.2	6.2	4	5	32
St. Louis, Mo.	153	9.9	11.2	15	14	
St. Paul, Minn.	46	9.9	10.7	8	7	74
Salt Lake City, Utah <sup>1</sup>	25	10.3	5.9	4	0	65
San Antonio, Tex.	50	14.1	11.1	11	5	
San Francisco, Calif.	123	11.9	13.7	10	13	60
Seattle, Wash.	49	8.1	7.9	6	3	53
Spokane, Wash.	15	7.5	15.5	1	3	22
Springfield, Mass.	28	10.1	4.5	4	3	57
Tacoma, Wash.	15	7.7		2		50
Toledo, Ohio.	44	8.5	13.2	10	7	101
Trenton, N. J.	24	9.8	11.7	5	7	85
Utica, N. Y.	25	12.6		5		106
Washington, D. C.	105	12.5	12.0	21	14	120
Wilmington, Del.	16	7.1	11.3	2	6	41
Worcester, Mass.	45	12.2	11.1	5	5	57
Yonkers, N. Y.	15	7.3	5.9	5	3	108
Youngstown, Ohio.	40	15.8	6.7	12	4	163

<sup>1</sup> Deaths for week ended Friday, Sept. 7, 1923.

# PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

## UNITED STATES.

### CURRENT STATE SUMMARIES.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

Reports for Week Ended September 15, 1923.

ALABAMA.		CALIFORNIA.	
	Cases.		Cases.
Cerebrospinal meningitis.....	1	Anthrax—Napa.....	1
Chicken pox.....	3	Cerebrospinal meningitis—San Diego.....	1
Dengue.....	1	Diphtheria.....	91
Diphtheria.....	64	Influenza.....	2
Dysentery.....	13	Lethargic encephalitis:	
Influenza.....	15	Ontario.....	1
Malaria.....	395	San Francisco.....	1
Measles.....	76	Measles.....	109
Pellagra.....	10	Poliomyelitis:	
Pneumonia.....	9	Long Beach.....	1
Scarlet fever.....	10	Los Angeles County.....	2
Smallpox.....	1	Ontario.....	1
Tuberculosis.....	10	Pomona.....	1
Typhoid fever.....	65	San Diego.....	1
Whooping cough.....	45	Scarlet fever.....	48
		Smallpox.....	8
		Typhoid fever.....	17
ARIZONA.		COLORADO.	
Diphtheria.....	1		
Scarlet fever.....	1	(Exclusive of Denver.)	
Tuberculosis.....	86	Diphtheria.....	7
Typhoid fever.....	1	Measles.....	10
		Mumps.....	7
ARKANSAS.		Paratyphoid.....	2
Chicken pox.....	5	Pneumonia.....	1
Dengue.....	6	Scarlet fever.....	4
Diphtheria.....	15	Tuberculosis.....	56
Influenza.....	9	Typhoid fever.....	16
Malaria.....	187	Whooping cough.....	3
Measles.....	24		
Paratyphoid fever.....	1		
Pellagra.....	7		
Poliomyelitis.....	1		
Scarlet fever.....	5		
Trachoma.....	1		
Tuberculosis.....	13		
Typhoid fever.....	35		
Typhus fever.....	6		
Whooping cough.....	24		

## CONNECTICUT—continued.

	Cases.
Lethargic encephalitis.....	1
Malaria.....	3
Measles.....	5
Mumps.....	7
Pneumonia (lobar).....	2
Poliomyelitis.....	3
Scarlet fever.....	18
Tetanus.....	1
Tuberculosis (all forms).....	29
Typhoid fever.....	17
Whooping cough.....	33
DELAWARE.	
Diphtheria.....	1
Malaria.....	1
Measles.....	1
Tuberculosis.....	7
Typhoid fever.....	1
FLORIDA.	
Diphtheria.....	15
Malaria.....	22
Poliomyelitis.....	1
Typhoid fever.....	9
GEORGIA.	
Diphtheria.....	35
Dysentery (amebic).....	1
Hookworm disease.....	18
Influenza.....	2
Malaria.....	66
Measles.....	25
Mumps.....	3
Paratyphoid fever.....	7
Pellagra.....	1
Pneumonia.....	13
Scarlet fever.....	12
Smallpox.....	1
Tuberculosis (pulmonary).....	11
Typhoid fever.....	21
Typhus fever.....	2
Whooping cough.....	1
ILLINOIS.	
Cerebrospinal meningitis—Chicago.....	1
Diphtheria:	
Cook County.....	73
Rock Island County.....	9
Scattering.....	42
Influenza.....	8
Lethargic encephalitis—Chicago.....	1
Pneumonia.....	102
Poliomyelitis:	
Adams County.....	2
Champaign County.....	1
Cook County.....	4
Hancock County.....	1
McHenry County.....	1
Scarlet fever:	
Cook County.....	35
Scattering.....	57
Smallpox.....	1
Typhoid fever:	
Cook County.....	12
Madison County.....	9
Peoria County.....	14
Scattering.....	72
Whooping cough.....	106

## INDIANA.

	Cases.
Diphtheria.....	58
Influenza.....	15
Measles.....	16
Poliomyelitis—Lake County.....	1
Rabies in animals—Marion County.....	1
Scarlet fever.....	35
Smallpox.....	14
Tuberculosis.....	12
Typhoid fever.....	35
IOWA.	
Diphtheria.....	21
Poliomyelitis.....	11
Scarlet fever.....	13
Smallpox.....	4
Typhoid fever.....	3

## KANSAS.

Cerebrospinal meningitis.....	1
Chicken pox.....	5
Diphtheria.....	49
Dysentery (bacillary).....	1
German measles.....	1
Influenza.....	1
Malaria.....	1
Measles.....	18
Mumps.....	14
Pneumonia.....	3
Poliomyelitis.....	16
Scarlet fever.....	42
Smallpox.....	5
Tuberculosis.....	39
Typhoid fever.....	40
Whooping cough.....	35

## LOUISIANA.

Cerebrospinal meningitis.....	2
Dengue.....	40
Diphtheria.....	17
Leprosy.....	2
Malaria.....	9
Measles.....	4
Poliomyelitis.....	1
Smallpox.....	1
Tuberculosis.....	25
Typhoid fever.....	26
Whooping cough.....	3

## MAINE.

Chicken pox.....	1
Diphtheria.....	4
German measles.....	1
Mumps.....	2
Pneumonia.....	1
Scarlet fever.....	12
Tuberculosis.....	5
Typhoid fever.....	1
Whooping cough.....	15

MARYLAND.<sup>1</sup>

Chicken pox.....	7
Diphtheria.....	30
Dysentery.....	9
Impetigo contagiosa.....	2
Influenza.....	1
Malaria.....	8

<sup>1</sup> Week ended Friday.

MARYLAND—continued.		Cases.	MISSOURI—continued.		Cases.
Measles.....		15	Mumps.....		3
Mumps.....		1	Pneumonia.....		1
Ophthalmia neonatorum.....		1	Poliomyelitis.....		1
Paratyphoid fever.....		1	Scarlet fever.....		57
Pneumonia (all forms).....		19	Smallpox.....		27
Poliomyelitis.....		1	Tetanus.....		1
Scarlet fever.....		20	Trachoma.....		6
Septic sore throat.....		1	Tuberculosis.....		33
Smallpox.....		2	Typhoid fever.....		28
Tuberculosis.....		62	Whooping cough.....		62
Typhoid fever.....		44	MONTANA.		
Whooping cough.....		36	Poliomyelitis—Great Falls.....		1
MASSACHUSETTS.			Rocky Mountain spotted fever:		
Anthrax.....		1	Hamilton.....		1
Cerebrospinal meningitis.....		2	Missoula.....		1
Chicken pox.....		33	Scarlet fever.....		7
Conjunctivitis (suppurative).....		13	Smallpox.....		16
Diphtheria.....		127	Typhoid fever.....		3
German measles.....		3	NEW JERSEY.		
Hookworm disease.....		1	Cerebrospinal meningitis.....		2
Influenza.....		3	Chicken pox.....		10
Lethargic encephalitis.....		2	Diphtheria.....		60
Measles.....		42	Dysentery.....		1
Mumps.....		35	Influenza.....		11
Ophthalmia neonatorum.....		23	Malaria.....		1
Pneumonia (lobar).....		18	Measles.....		18
Poliomyelitis.....		11	Pneumonia.....		24
Scarlet fever.....		73	Poliomyelitis.....		9
Tetanus.....		1	Scarlet fever.....		27
Trachoma.....		2	Trachoma.....		2
Trichinosis.....		1	Typhoid fever.....		28
Tuberculosis (all forms).....		143	Whooping cough.....		55
Typhoid fever.....		28	NEW MEXICO.		
Whooping cough.....		110	Conjunctivitis.....		6
MICHIGAN.			Diphtheria.....		19
Diphtheria.....		116	Measles.....		1
Measles.....		35	Mumps.....		1
Pneumonia.....		31	Pneumonia.....		3
Scarlet fever.....		104	Tuberculosis.....		31
Smallpox.....		20	Typhoid fever.....		19
Tuberculosis.....		40	Whooping cough.....		7
Typhoid fever.....		29	NEW YORK.		
Whooping cough.....		68	(Exclusive of New York City.)		
MINNESOTA.			Cerebrospinal meningitis.....		2
Chicken pox.....		10	Diphtheria.....		106
Diphtheria.....		101	Lethargic encephalitis.....		1
Measles.....		42	Influenza.....		4
Pneumonia.....		3	Measles.....		119
Poliomyelitis.....		4	Pneumonia.....		45
Scarlet fever.....		105	Poliomyelitis.....		18
Smallpox.....		5	Scarlet fever.....		78
Tuberculosis.....		67	Smallpox.....		1
Typhoid fever.....		12	Typhoid fever.....		56
Whooping cough.....		10	Whooping cough.....		164
MISSISSIPPI.			NORTH CAROLINA.		
Diphtheria.....		33	Chicken pox.....		9
Scarlet fever.....		5	Diphtheria.....		178
Typhoid fever.....		27	German measles.....		6
MISSOURI.			Measles.....		79
Chicken pox.....		7	Scarlet fever.....		71
Diphtheria.....		87	Septic sore throat.....		3
Epidemic sore throat.....		5	Smallpox.....		15
Influenza.....		1	Typhoid fever.....		52
Measles.....		23	Whooping cough.....		218

OREGON.		Cases.	VIRGINIA.		Cases.
Chicken pox.....	1		Cerebrospinal meningitis:		
Diphtheria.....	13		Prince Edward County.....	1	
Measles.....	8		Poliomyelitis:		
Mumps.....	2		Stafford County.....	1	
Pneumonia.....	12				
Scarlet fever:			WASHINGTON.		
Portland.....	9		Chicken pox.....	3	
Scattering.....	2		Diphtheria.....	23	
Smallpox.....	3		Measles.....	5	
Tuberculosis.....	12		Mumps.....	2	
Typhoid fever.....	3		Scarlet fever.....	26	
Whooping cough.....	1		Smallpox.....	11	
			Tuberculosis.....	21	
SOUTH DAKOTA.			Typhoid fever.....	28	
Cerebrospinal meningitis.....	1		Whooping cough.....	23	
Chicken pox.....	3				
Diphtheria.....	6		WEST VIRGINIA.		
Measles.....	5		Diphtheria.....	12	
Poliomyelitis.....	1		Scarlet fever.....	17	
Scarlet fever.....	10		Typhoid fever.....	26	
Smallpox.....	4				
Tuberculosis.....	1		WISCONSIN.		
Whooping cough.....	7		Milwaukee:		
			Chicken pox.....	10	
TEXAS.			Diphtheria.....	13	
Dengue.....	41		Ophthalmia neonatorum.....	1	
Diphtheria.....	30		Pneumonia.....	4	
Dysentery.....	11		Poliomyelitis.....	1	
Paratyphoid fever.....	7		Scarlet fever.....	12	
Scarlet fever.....	14		Tuberculosis.....	8	
Smallpox.....	2		Whooping cough.....	30	
Trachoma.....	5		Scattering:		
Tuberculosis.....	29		Cerebrospinal meningitis.....	1	
Typhoid fever.....	24		Chicken pox.....	21	
Whooping cough.....	33		Diphtheria.....	30	
			Measles.....	34	
VERMONT.			Mumps.....	3	
Chicken pox.....	4		Pneumonia.....	4	
Diphtheria.....	6		Poliomyelitis.....	1	
Measles.....	33		Scarlet fever.....	57	
Mumps.....	4		Smallpox.....	15	
Poliomyelitis.....	1		Tuberculosis.....	22	
Scarlet fever.....	10		Typhoid fever.....	8	
Smallpox.....	4		Whooping cough.....	76	
Typhoid fever.....	1				
Whooping cough.....	45				

### Reports for Week Ended September 8, 1923.

DISTRICT OF COLUMBIA.		Cases.	NORTH DAKOTA.		Cases.
Diphtheria.....	2		Chicken pox.....	1	
Influenza.....	3		Diphtheria.....	11	
Measles.....	4		Measles.....	37	
Poliomyelitis.....	1		Pneumonia.....	1	
Scarlet fever.....	7		Scarlet fever.....	10	
Smallpox.....	1		Smallpox.....	1	
Tuberculosis.....	21		Trachoma.....	1	
Typhoid fever.....	8		Tuberculosis.....	7	
Whooping cough.....	9		Typhoid fever.....	7	
			Whooping cough.....	2	
NEBRASKA.					
Chicken pox.....	4		WYOMING.		
Diphtheria.....	17		Measles.....	1	
Influenza.....	7		Mumps.....	1	
Measles.....	1		Pneumonia.....	1	
Poliomyelitis—Wymore.....	1		Scarlet fever.....	1	
Scarlet fever.....	17		Tuberculosis.....	2	
Smallpox.....	1		Typhoid fever.....	5	
Typhoid fever.....	3		Whooping cough.....	1	
Whooping cough.....	2				

1 Deaths.

## SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Polio-myelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
<i>July, 1923.</i>										
Nebraska.....		28	32	1	35		3	33		24
Wyoming.....		1			95		1	7	3	9
Rhode Island.....		41		1	63		2	27		7
<i>August, 1923.</i>										
Arkansas.....	3	21	31	1,324	118	54	4	10	5	162
Florida.....	5	43	29	139	69	16	2	4	1	64
Michigan.....	3	419		3	357		7	363	51	106
Nebraska.....		83	1	1	14		39	39	5	6
New Jersey.....	10	268	15	8	110		43	84		96

## RECIPROCAL NOTIFICATION, JULY, 1923.

Cases of communicable diseases referred during July, 1923, to other State health departments by departments of health of certain States.

Referred by—	Diphtheria.	Dysentery (bacillary).	Encephalitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.
Connecticut.....		1		3		1	2
Illinois.....					1	8	
Massachusetts.....							3
Minnesota.....	2		1			4	
New Jersey.....					1		1
New York.....	2			1			3
Ohio.....				1			

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923.

## ANTHRAX.

City.	Cases.	Deaths.
California:		
Stockton.....	1	

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 1, 1923.		City.	Median for previous years.	Week ended Sept. 1, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Montana:			
Tuscaloosa.....	0	1	.....	Great Falls.....	0	.....	1
California:				Missoula.....	0	1	1
Bakersfield.....	0	1	.....	New Jersey:			
Glendale.....	.....	.....	1	Bayonne.....	0	1	.....
Illinois:				Hackensack.....	0	1	.....
Freeport.....	0	1	1	New York:			
Kewanee.....	0	1	.....	New York.....	4	3	1
Quincy.....	0	1	1	Ohio:			
Indiana:				Barberton.....	0	.....	1
Mishawaka.....	0	.....	1	Cleveland.....	0	.....	1
Massachusetts:				Rhode Island:			
Braintree.....	.....	.....	1	Providence.....	0	1	.....
New Bedford.....	0	1	.....	Wisconsin:			
Michigan:				Kenosha.....	0	1	1
Ann Arbor.....	0	1	1				
Detroit.....	0	1	.....				
Kalamazoo.....	0	1	1				

## DIPHTHERIA.

See p. 2226; also Current State summaries, p. 2215, and Monthly summaries by States, p. 2219.

## INFLUENZA.

City.	Cases.		Deaths, week ended Sept. 1, 1923.	City.	Cases.		Deaths, week ended Sept. 1, 1923.
	Week ended Sept. 2, 1922.	Week ended Sept. 1, 1923.			Week ended Sept. 2, 1922.	Week ended Sept. 1, 1923.	
Alabama:				New Jersey:			
Montgomery.....	.....	.....	1	Newark.....	11	3	.....
California:				Orange.....	2	.....	.....
Los Angeles.....	63	1	.....	Passaic.....	.....	1	.....
Oakland.....	.....	1	.....	New York:			
Connecticut:				Middletown.....	1	.....	.....
Fairfield.....	.....	1	.....	New York.....	4	7	3
Florida:				Rome.....	.....	.....	1
Tampa.....	1	.....	.....	Ohio:			
Illinois:				Akron.....	1	.....	.....
Danville.....	1	.....	.....	Cincinnati.....	.....	1	.....
Rockford.....	.....	.....	1	Cleveland.....	1	.....	.....
Indiana:				Columbus.....	.....	.....	1
Indianapolis.....	.....	.....	1	Pennsylvania:			
Maryland:				Philadelphia.....	6	.....	1
Baltimore.....	.....	2	.....	Pittsburgh.....	.....	1	.....
Cumberland.....	1	.....	.....	Rhode Island:			
Massachusetts:				Providence.....	.....	1	.....
Boston.....	.....	3	.....	Virginia:			
Saugus.....	1	.....	.....	Richmond.....	.....	1	.....
Somerville.....	.....	1	.....				

## LEPROSY.

City.	Cases.	Deaths.
California:		
Los Angeles.....	1	.....

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Wisconsin:		
San Francisco.....	3	1	Milwaukee.....	1	
New Jersey:					
East Orange.....	2	2			

## MALARIA.

Alabama:			Kansas:		
Birmingham.....	4		Topeka.....	2	
Dothan.....	1		Maryland:		
Montgomery.....	1		Baltimore.....	1	
Arkansas:			Massachusetts:		
Little Rock.....	4		Boston.....	1	
California:			Michigan:		
Los Angeles.....	1		Flint.....	1	
Sacramento.....	3		New Jersey:		
Connecticut:			Newark.....	1	
New Britain.....	1		New York:		
Florida:			New York.....	1	
Tampa.....	2		Ohio:		
Georgia:			Cleveland.....	1	
Atlanta.....	1	2	Tennessee:		
Augusta.....			Memphis.....	20	
Brunswick.....	7		Texas:		
Macon.....	3		Dallas.....	1	
Illinois:			Houston.....		1
Chicago.....	1				
Iowa:					
Sioux City.....	1				

## MEASLES.

See p. 2226; also Current State summaries, p. 2215, and Monthly summaries by States, p. 2219.

## PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			South Carolina:		
Birmingham.....	1	1	Charleston.....		2
Georgia:			Columbia.....		2
Atlanta.....		3	Texas:		
North Carolina:			Ft. Worth.....	1	1
Winston-Salem.....	1	1	Houston.....		1

## PNEUMONIA (ALL FORMS).

Alabama:			District of Columbia:		
Birmingham.....	8	4	Washington.....		6
Mobile.....		2	Georgia:		
Montgomery.....		1	Atlanta.....		5
Arkansas:			Augusta.....		2
Little Rock.....	1		Savannah.....		3
California:			Illinois:		
Long Beach.....		1	Aurora.....		1
Los Angeles.....	21	14	Chicago.....	63	27
Oakland.....	3	2	Cicero.....		1
Sacramento.....		2	Decatur.....		1
San Bernardino.....		1	East St. Louis.....		4
San Diego.....		2	Jacksonville.....		1
San Francisco.....		4	Oak Park.....	1	
Santa Barbara.....		3	Indiana:		
Stockton.....		1	East Chicago.....		4
Colorado:			Fort Wayne.....		2
Denver.....		1	Frankfort.....		1
Connecticut:			Gary.....		4
New Britain.....	2	1	Hammond.....		1
New Haven.....		3	Indianapolis.....		4
New London.....		1	La Fayette.....		1
Waterbury.....		3	Terre Haute.....		1

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
<b>Kansas:</b>			<b>New Jersey—Continued.</b>		
Kansas City.....	3	.....	Passaic.....		2
Wichita.....		1	Plainfield.....		1
<b>Kentucky:</b>			Trenton.....		1
Covington.....		1	<b>New York:</b>		
Louisville.....	3	.....	Albany.....	3	.....
<b>Louisiana:</b>			Amsterdam.....	1	.....
New Orleans.....	6	1	Buffalo.....	9	5
<b>Maine:</b>			Cohoes.....		1
Portland.....		1	Glens Falls.....		1
<b>Maryland:</b>			Ithaca.....	1	.....
Baltimore.....	16	11	Lackawanna.....	2	1
Cumberland.....		1	New York.....	84	64
<b>Massachusetts:</b>			Newburgh.....		1
Boston.....		7	Niagara Falls.....	2	.....
Cambridge.....	1	.....	North Tonawanda.....		1
Chelsea.....	1	.....	Rochester.....	7	3
Chicopee.....		1	Saratoga Springs.....		1
Clinton.....		1	Syracuse.....		3
Fall River.....		2	Troy.....	4	2
Haverhill.....	1	.....	Watertown.....		1
Holyoke.....		1	Yonkers.....	1	.....
New Bedford.....		3	<b>North Carolina:</b>		
Newton.....	1	.....	Winston-Salem.....		2
Pittsfield.....		1	<b>Ohio:</b>		
Salem.....	1	.....	Akron.....	4	.....
Southbridge.....		1	Cincinnati.....		9
Woburn.....		1	Cleveland.....	10	6
Worcester.....		2	Columbus.....		2
<b>Michigan:</b>			Dayton.....	1	.....
Ann Arbor.....	2	1	Findlay.....		1
Benton Harbor.....		1	Mansfield.....	1	.....
Detroit.....	33	15	Springfield.....		2
Flint.....	1	.....	Toledo.....		2
Grand Rapids.....		1	Youngstown.....		1
Highland Park.....		1	<b>Oregon:</b>		
Jackson.....		1	Portland.....		3
Kalamazoo.....		1	<b>Pennsylvania:</b>		
Pontiac.....	1	.....	Philadelphia.....	33	14
<b>Minnesota:</b>			Pittsburgh.....		15
Minneapolis.....		2	<b>Rhode Island:</b>		
St. Paul.....		4	Providence.....		2
<b>Missouri:</b>			<b>South Carolina:</b>		
Kansas City.....		5	Charleston.....		1
St. Joseph.....		2	Columbia.....		2
<b>Montana:</b>			<b>Tennessee:</b>		
Helena.....		1	Memphis.....		6
Missoula.....	2	1	Nashville.....		2
<b>Nebraska:</b>			<b>Texas:</b>		
Omaha.....		3	Beaumont.....		1
<b>New Hampshire:</b>			Galveston.....		1
Manchester.....		1	San Antonio.....		4
Nashua.....		2	<b>Utah:</b>		
<b>New Jersey:</b>			Salt Lake City.....		1
Atlantic City.....		1	<b>Virginia:</b>		
Camden.....		3	Norfolk.....		2
East Orange.....	1	.....	<b>Wisconsin:</b>		
Harrison.....	1	.....	Milwaukee.....	2	.....
Hoboken.....		3	Racine.....		1
Newark.....	21	3	Sheboygan.....		1
Orange.....	1	.....			

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 1, 1923.		City.	Median for previous years.	Week ended Sept. 1, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Nebraska:			
Bakersfield.....	0	1		Omaha.....	0	8	
Connecticut:				New Hampshire:			
Greenwich.....	0	1		Dover.....	0	1	
Meriden.....	0	1		New Jersey:			
New Haven.....	0	1		Atlantic City.....	0	1	
Waterbury.....	0	1		Bayonne.....	0	2	
Illinois:				Clifton.....	0	1	
Chicago.....	6	9		Hoboken.....	0		1
Indiana:				Newark.....	0	6	1
Indianapolis.....	0	1	1	Orange.....	0	1	
Kansas:				West Hoboken.....	0	1	
Topeka.....	0	4		New York:			
Louisiana:				New York.....	6	37	2
New Orleans.....	0	1	1	Newburgh.....	0	1	
Massachusetts:				Rochester.....	0		1
Boston.....	1	1		Yonkers.....	0	1	
Fall River.....	0	1	1	Pennsylvania:			
Haverhill.....	0	1		Pittsburgh.....	0	1	
Holyoke.....	0	1		Vermont:			
Medford.....	0	1		Burlington.....	0	1	
Michigan:				Virginia:			
Detroit.....	0	1	1	Richmond.....	0		2
Minnesota:				Wisconsin:			
St. Paul.....	0	1	1	Milwaukee.....	0	1	
Missouri:							
Joplin.....	0	1					

## RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		New Mexico:	
Los Angeles.....	10	Albuquerque.....	1
Kentucky:		Tennessee:	
Louisville.....	2	Memphis.....	1
Massachusetts:		Texas:	
Arlington.....	3	Dallas.....	3

## SCARLET FEVER.

See p. 2226; also Current State summaries, p. 2215, and Monthly summaries by States, p. 2219.

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Sept. 1, 1923.		City.	Median for pre- vious years.	Week ended Sept. 1, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Missouri:			
Mobile.....	0	3	.....	St. Louis.....	0	1	.....
California:				Montana:			
Long Beach.....	0	2	.....	Missoula.....	0	1	.....
Los Angeles.....	1	2	.....	New York:			
Pasadena.....	0	1	.....	Niagara Falls.....	0	1	.....
District of Columbia:				North Carolina:			
Washington.....	0	3	.....	Winston-Salem.....	0	1	.....
Georgia:				Oregon:			
Atlanta.....	1	2	.....	Portland.....	1	7	.....
Illinois:				Tennessee:			
Springfield.....	0	1	.....	Knoxville.....	0	1	.....
Indiana:				Virginia:			
Gary.....	0	1	.....	Roanoke.....	0	1	.....
Huntington.....	0	1	.....	Washington:			
Michigan:				Aberdeen.....	0	1	.....
Detroit.....	1	6	.....	Spokane.....	0	1	.....
Grand Rapids.....	0	8	.....	Walla Walla.....	1	1	.....
Holland.....	0	1	.....	Wisconsin:			
Minnesota:				Superior.....	0	7	.....
Duluth.....	0	1	.....				
St. Paul.....	1	2	.....				

## TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			North Carolina:		
Los Angeles.....	1	.....	Raleigh.....		1
Illinois:			Ohio:		
Chicago.....	1	.....	Findlay.....	1	1
Michigan:			Salem.....		1
Detroit.....		1	Tennessee:		
Montana:			Memphis.....	1	.....
Great Falls.....		1	Texas:		
New Jersey:			Fort Worth.....	1	1
Union.....	1	.....			
New York:					
Elmira.....	1	.....			
New York.....	1	.....			

## TUBERCULOSIS.

See p. 2226; also Current State summaries, p. 2215.

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 1, 1923.		City.	Median for previous years.	Week ended Sept. 1, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
<b>Alabama:</b>				<b>Michigan:</b>			
Birmingham.....	9	8	1	Detroit.....	8	.....	2
Dothan.....	1	1	.....	Flint.....	3	2	.....
Mobile.....	1	1	.....	Grand Rapids.....	1	1	.....
Montgomery.....	1	2	.....	Kalamazoo.....	1	2	1
<b>Arkansas:</b>				Muskegon.....	0	1	.....
Little Rock.....	1	3	.....	<b>Minnesota:</b>			
<b>California:</b>				Minneapolis.....	3	4	1
Los Angeles.....	4	4	1	St. Paul.....	1	5	.....
San Bernardino.....	0	.....	1	<b>Missouri:</b>			
San Diego.....	0	1	.....	Joplin.....	0	1	.....
<b>Colorado:</b>				St. Louis.....	10	10	.....
Denver.....	4	6	1	<b>New Hampshire:</b>			
Trinidad.....	1	1	.....	Dover.....	0	2	.....
<b>Connecticut:</b>				Manchester.....	0	.....	1
Milford.....	0	1	.....	<b>New Jersey:</b>			
New Haven.....	5	7	.....	Englewood.....	0	2	.....
<b>District of Columbia:</b>				Newark.....	4	1	.....
Washington.....	8	4	1	Plainfield.....	0	1	1
<b>Florida:</b>				Trenton.....	2	2	1
Tampa.....	2	.....	1	<b>New Mexico:</b>			
<b>Georgia:</b>				Albuquerque.....	0	1	.....
Atlanta.....	3	1	3	<b>New York:</b>			
Augusta.....	2	1	.....	Albany.....	1	2	.....
Macon.....	1	1	.....	Buffalo.....	6	3	.....
Rome.....	2	1	.....	Elmira.....	0	.....	1
Savannah.....	2	1	.....	Hudson.....	0	1	.....
<b>Illinois:</b>				New York.....	64	51	7
Chicago.....	9	10	1	Newburgh.....	0	1	.....
Decatur.....	0	1	.....	Niagara Falls.....	0	1	.....
East St. Louis.....	0	7	2	Rochester.....	1	4	.....
Jacksonville.....	3	5	.....	Schenectady.....	0	2	.....
Kewanee.....	0	3	1	Syracuse.....	4	1	.....
Pooria.....	0	3	1	Watertown.....	0	3	.....
Springfield.....	0	1	.....	Yonkers.....	0	1	.....
<b>Indiana:</b>				<b>North Carolina:</b>			
Fort Wayne.....	0	14	1	Durham.....	4	2	.....
Indianapolis.....	6	3	1	Raleigh.....	0	.....	1
Mishawaka.....	0	1	.....	Winston-Salem.....	2	4	.....
<b>Iowa:</b>				<b>Ohio:</b>			
Ottumwa.....	0	1	.....	Akron.....	2	2	.....
<b>Kansas:</b>				Bellaire.....	.....	.....	1
Coffeyville.....	1	1	.....	Cincinnati.....	2	4	.....
Kansas City.....	1	2	.....	Cleveland.....	8	6	.....
Parsons.....	0	1	.....	East Cleveland.....	0	1	.....
Topeka.....	3	1	.....	Kenmore.....	0	1	.....
Wichita.....	2	2	.....	Mansfield.....	1	1	.....
<b>Kentucky:</b>				New Philadelphia.....	0	1	.....
Covington.....	0	2	.....	Norwood.....	0	.....	1
Louisville.....	6	3	.....	Toledo.....	7	2	1
Owensboro.....	0	1	.....	Youngstown.....	2	1	1
<b>Louisiana:</b>				Zanesville.....	0	2	.....
New Orleans.....	3	3	.....	<b>Oklahoma:</b>			
<b>Maine:</b>				Tulsa.....	2	9	.....
Bangor.....	0	1	.....	<b>Oregon:</b>			
Portland.....	3	4	.....	Portland.....	1	2	.....
<b>Maryland:</b>				<b>Pennsylvania:</b>			
Baltimore.....	17	7	.....	Altona.....	0	1	.....
Frederick.....	.....	2	.....	Bethlehem.....	1	2	.....
<b>Massachusetts:</b>				Braddock.....	0	1	.....
Boston.....	6	3	.....	Bristol.....	0	1	.....
Everett.....	0	1	.....	Butler.....	0	3	.....
Fall River.....	5	2	.....	Harrisburg.....	2	2	.....
Haverhill.....	0	1	.....	Philadelphia.....	24	10	.....
Medford.....	0	1	.....	Pittsburgh.....	6	4	.....
New Bedford.....	0	1	.....	Uniontown.....	0	1	.....
Newburyport.....	0	1	.....	<b>South Carolina:</b>			
North Adams.....	0	1	.....	Charleston.....	4	2	.....
Quincy.....	0	2	.....	Columbia.....	2	1	.....
Salem.....	0	1	.....				
Somerville.....	0	1	.....				

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## TYPHOID FEVER—Continued.

City.	Median for pre- vious years.	Week ended Sept. 1, 1923.		City.	Median for pre- vious years.	Week ended Sept. 1, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Tennessee:				Washington:			
Memphis.....	4	22		Everett.....	0	7	
Nashville.....	11	1		Seattle.....	3	3	
Texas:				Tacoma.....	0	3	
Dallas.....	3	3	1	Vancouver.....	0	1	
Ft. Worth.....	1	2	1	Walla Walla.....	1	1	
Houston.....	1	2		Yakima.....	0	1	
Utah:				West Virginia:			
Provo.....	0	1		Bluefield.....	1	1	
Salt Lake City.....	1	2	1	Charleston.....	2	2	
Virginia:				Huntington.....	0	1	
Lynchburg.....	2	1		Martinsburg.....	1	3	
Norfolk.....	1	2		Wisconsin:			
Portsmouth.....	1	2		Milwaukee.....	1	2	1
Richmond.....	3	10	1	Wausau.....	0	2	
				West Allis.....	1	1	

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Birmingham.....	178,806	51	1		1		3		4	3
Dothan.....	10,034	1	1		7				1	
Mobile.....	60,777	13								3
Montgomery.....	43,464	18	1						1	
Tuscaloosa.....	11,996		6							
California:										
Alameda.....	28,806	6	5							
Bakersfield.....	18,638	9								
Eureka.....	12,923	2								
Glendale.....	13,536	6								
Long Beach.....	55,593	20	6			1			1	1
Los Angeles.....	576,673	179	29	1	11	1	3		51	20
Oakland.....	216,261	33	13	2	3		8			1
Pasadena.....	45,354	13	2				1			
Richmond.....	16,843	3	1							
Riverside.....	19,341	6	1							
Sacramento.....	65,908	21	2						2	2
San Bernardino.....	18,721	12	1				1			1
San Diego.....	74,683	20					2		2	1
San Francisco.....	506,676	134	22	1	108		4	1	18	10
Santa Ana.....	15,485	4	1							1
Santa Barbara.....	19,441	6								
Santa Cruz.....	10,917	3								
Stockton.....	40,296	8					3			1
Vallejo.....	21,107	3	1							
Colorado:										
Denver.....	256,491	67	29	1	1		4			2
Greeley.....	10,958	6								
Pueblo.....	43,650	4	10				1			
Trinidad.....	10,906	1	1	1			1			
Connecticut:										
Bridgeport.....	143,555	19	2		1		3		3	3
Danbury (town).....	22,325	6								
Fairfield (town).....	11,475	1								
Greenwich (town).....	22,123				1					
Hartford.....	138,686	34	3		1		1		2	1
Manchester (town).....	18,370	2					1			
Meriden (city).....	29,867								1	1
Milford (town).....	10,193	1								
New Britain.....	59,316	12	1				1			1
New Haven.....	162,537	24	4				4		1	1
New London.....	25,688	8								2
Waterbury.....	91,715	14	2				6			3
District of Columbia:										
Washington.....	437,571	108	7		2				28	9

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## DIPHtheria, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Florida:										
St. Petersburg.....	14,237	5								1
Tampa.....	51,608	19							2	1
Georgia:										
Albany.....	11,555								1	
Atlanta.....	200,616	63	7	1		2	4		5	5
Augusta.....	52,548	18			1				1	4
Macon.....	52,995								4	
Rome.....	13,252				3					
Savannah.....	83,252	17								3
Idaho:										
Boise.....	21,393	6			1					
Illinois:										
Aurora.....	36,397	7	1		2				1	
Bloomington.....	28,725	3	1				1			
Centralia.....	12,491	7								
Chicago.....	2,701,705	506	51	3	14	1	15	1	184	33
Cicero.....	44,995	3								
Decatur.....	43,818	7	2				2			2
East St. Louis.....	66,767	17	3							1
Elgin.....	27,454	4	1						2	
Evanston.....	37,234	4	1						2	
Forest Park.....	10,768		2							
Freeport.....	19,669	5					3			
Galesburg.....	23,834	8								
Jacksonville.....	15,713	11								
Kewanee.....	16,026	6								
Oak Park.....	39,858	10								
Pekin.....	12,086						2			
Peoria.....	75,121	24	1				3	1		
Quincy.....	35,978	14								1
Rock Island.....	35,177	1	1				1			
Rockford.....	65,651	15			1					
Springfield.....	59,183	16							1	1
Indiana:										
Anderson.....	29,767	5								
Bloomington.....	11,595	4					1			
Crawfordsville.....	10,139	3								
East Chicago.....	35,937	11		1						
Elwood.....	10,790	0								
Fort Wayne.....	86,549	19	3				1			
Frankfort.....	11,585	5			1					
Gary.....	55,378	12	1							1
Hammond.....	36,004	11								1
Huntington.....	14,009	7	1				1			
Indianapolis.....	314,194	92	2		2		1		4	7
Kokomo.....	39,657	4	4	1						
La Fayette.....	22,486	6							2	
Logansport.....	21,626	5								
Michigan City.....	19,457	11								
Mishawaka.....	15,195	6					1			
Muncie.....	36,524	9								
Newcastle.....	14,458	2	2							
South Bend.....	70,983	15	2				2	1		2
Terre Haute.....	66,083	17	2				1			
Iowa:										
Burlington.....	24,057	6								
Cedar Rapids.....	45,566		1	1						
Dubuque.....	39,141						1			
Iowa City.....	11,267		1				1			
Muscatine.....	16,068	5			1				1	
Sioux City.....	71,227		3		4		1			
Waterloo.....	36,230		2				1			
Kansas:										
Coffeyville.....	13,452	2								
Fort Scott.....	10,693	1					1			
Hutchinson.....	23,298				1		1			
Kansas City.....	101,177		2		4		9		5	
Leavenworth.....	16,912	5	2		1					
Topeka.....	50,022	16			5		1		1	
Wichita.....	72,217	25	4				1		1	1
Kentucky:										
Covington.....	57,121	8			1				1	
Henderson.....	12,169	4								
Louisville.....	234,891	70	1		1		1		17	3



## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<b>Michigan—Continued.</b>										
Kalamazoo.....	48,487	14	2	1			3		1	2
Muskegon.....	36,570	9					1			
Pontiac.....	34,273	14	2				3			2
Port Huron.....	25,944	7	1		1		1			
Sault Ste. Marie.....	12,066	2								
<b>Minnesota:</b>										
Duluth.....	98,917	14	3		2		6			
Hibbing.....	15,089						6			
Minneapolis.....	380,582	65	12	1			18		20	1
Rochester.....	13,722	17							1	1
St. Cloud.....	15,873						1			
St. Paul.....	234,698	57	13	1	1		9		6	4
Virginia.....	14,022						12			
Winona.....	19,143	4					1			
<b>Missouri:</b>										
Independence.....	11,656		1							
Kansas City.....	324,410	70	10		1		6		3	4
St. Joseph.....	77,939	23	1				1			1
St. Louis.....	772,197	179	15	1	1		13		35	12
Springfield.....	39,631	14								
<b>Montana:</b>										
Anaconda.....	11,668	2								
Billings.....	15,100	6								
Great Falls.....	24,121	8	4	1					3	
Helena.....	12,037	1								
Missoula.....	12,668	10			1					
<b>Nebraska:</b>										
Lincoln.....	54,948	6								
Omaha.....	191,631	38	6	1	1		2			
<b>Nevada:</b>										
Reno.....	12,016	5								
<b>New Hampshire:</b>										
Concord.....	22,167	6					2			
Dover.....	13,629	1								
Keene.....	11,210	1			21					
Manchester.....	78,384	18	2							1
Nashua.....	28,379	10								
<b>New Jersey:</b>										
Asbury Park.....	12,400	4								
Atlantic City.....	50,707	11	2							1
Bayonne.....	76,754		1						2	
Bloomfield.....	22,019	1					1		1	
Camden.....	116,390	18			1					2
Ciifton.....	26,470	0	1							
East Orange.....	50,710	11							2	
Englewood.....	11,627	3								
Garfield.....	19,381	3	2						1	
Hackensack.....	17,667	3								
Harrison.....	15,721								1	
Hoboken.....	68,166	13								
Kearny.....	26,724	5	1				1			1
Morristown.....	12,548	5								
Newark.....	414,524	84	3		9		3		10	7
Orange.....	33,288	7	1						1	1
Passaic.....	63,841	6	6				2			
Paterson.....	135,875		5				1		3	
Phillipsburg.....	16,923	10								
Plainfield.....	27,700	7			1					
Summit.....	10,174	1								
Trenton.....	119,289	38	7				2		2	4
Union (town).....	20,651								4	
West Hoboken.....	40,074	2							1	
West New York.....	29,926	5							1	
West Orange.....	15,573	3								
<b>New Mexico:</b>										
Albuquerque.....	15,157	8	2	1	1		1		2	5
<b>New York:</b>										
Albany.....	113,344		9						6	
Amsterdam.....	33,524	4	1						3	
Buffalo.....	506,775	111	3	1	3		1		19	5
Cohoes.....	22,987	8								
Elmira.....	45,393	15			9		2			
Geneva.....	14,648	3								

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
New York—Continued.											
Glens Falls.....	16,638	5									
Hornell.....	15,025	4									
Hudson.....	11,745	1							2		
Ithaca.....	17,004	3							1	1	
Lackawanna.....	17,918	5	1		6		1		1		
Lockport.....	21,308				1						
Middletown.....	18,420		1						1		
Mount Vernon.....	42,725	8								1	
New York.....	5,620,048	1,089	60	4	37		17		1,179	198	
Newburgh.....	30,366	6									
Niagara Falls.....	50,760	15							1	1	
North Tonawanda.....	15,482	2									
Olean.....	20,506	5					3				
Pekskill.....	15,888	3	1				1				
Plattsburg.....	10,909	2									
Rochester.....	295,750	59	7	1						2	
Rome.....	26,341	11			6						
Saratoga Springs.....	13,181	5	1								
Schenectady.....	88,723	19	4	1	4	1			2	1	
Syracuse.....	171,717	43	4		3		8		3	1	
Troy.....	72,013	23	1		5				2		
Watertown.....	31,285	11	2				1		1		
Yonkers.....	100,176	6	5	1	1		2				
North Carolina:											
Durham.....	21,719	1	2		1				2		
Raleigh.....	24,418	10	1				1			2	
Rocky Mount.....	12,742	2									
Salisbury.....	13,884	3									
Wilmington.....	33,372	7	2				2				
Winston-Salem.....	48,395	18	1		12		1				
North Dakota:											
Fargo.....	21,961	7								1	
Grand Forks.....	14,040						3				
Ohio:											
Akron.....	208,435	31	3				7				
Alliance.....	21,603	1									
Barberton.....	18,811	5	1							2	
Bellaire.....	15,061	3					2				
Bucyrus.....	10,425	3									
Cambridge.....	13,104	3									
Canton.....	87,091	18	1				1				
Chillicothe.....	15,831	3									
Cincinnati.....	401,247	101	14	1	9		5		21	6	
Cleveland.....	796,841	162	23	3	8		13		23	19	
Cleveland Heights.....	15,236						1				
Columbus.....	237,031	67	5		1		3		7	5	
Dayton.....	152,559	37	7				7		1		
East Cleveland.....	27,202	4	1				1		1	1	
East Youngstown.....	11,237	4							1	1	
Findlay.....	17,021	9									
Fremont.....	12,468	3									
Hamilton.....	39,675	7							1	1	
Lancaster.....	14,706	5								1	
Lima.....	41,326	8	2								
Mansfield.....	27,824	6									
Martins Ferry.....	11,631	3									
Middletown.....	23,594	4	1	1			1		1		
Niles.....	13,080	3	1							1	
Norwood.....	24,966	4									
Piqua.....	15,044	3									
Salem.....	10,305	4									
Sandusky.....	22,887	11									
Springfield.....	60,850	8			1		2				
Steubenville.....	28,508	3	1				1				
Tiffin.....	14,375	2					1				
Toledo.....	243,161	60	8	3	4		5		6	3	
Youngstown.....	132,358	39	64	2	21	1	14	1		4	
Zanesville.....	29,569	12									
Oklahoma:											
Tulsa.....	72,073		3								
Oregon:											
Portland.....	258,288	50	3	1	2		2		8	1	

<sup>1</sup> Pulmonary only.

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Pennsylvania:											
Allentown.....	73,502		1						1		
Altoona.....	60,331								1		
Berwick.....	12,181						2				
Bethlehem.....	50,358		3				1		2		
Braddock.....	20,879								1		
Carbondale.....	18,610		2				1				
Carrick.....	10,504						1				
Charleroi.....	11,516		1								
Chester.....	58,030						2				
Donora.....	14,131								1		
Duquesne.....	19,011		1								
Erie.....	93,372		1						7		
Harrisburg.....	75,917		1								
Jeanette.....	10,627		2						2		
Johnstown.....	67,327		1				1		2		
Lancaster.....	53,150				1		2				
McKees Rocks.....	16,713						2				
McKeesport.....	46,781								1		
Monessen.....	18,179		2								
Mount Carmel.....	17,469								1		
New Castle.....	44,938						2				
North Braddock.....	14,928		1								
Oil City.....	21,274						1				
Philadelphia.....	1,823,779	368	32	2	4		18		43	32	
Pittsburgh.....	588,343	134	28	2	7		13	1		8	
Plymouth.....	16,500										
Sharon.....	21,747						1				
Uniontown.....	15,692						2				
Wilkinsburg.....	24,403		1				2				
Williamsport.....	36,198		1		3						
Woodlawn.....	12,495		1								
York.....	47,512		1						1		
Rhode Island:											
Newport.....	30,255	4	8								
Pawtucket.....	64,218	12	1	1							
Providence.....	237,595	64	8		2		3			5	
South Carolina:											
Charleston.....	67,957	23					1				
Columbia.....	37,524	18			5				3		
Greenville.....	23,127	6								1	
South Dakota:											
Sioux Falls.....	25,202	7									
Tennessee:											
Chattanooga.....	57,805		5								
Knoxville.....	77,818		1				3		3	3	
Memphis.....	162,351	60	2		2		1		6	3	
Nashville.....	118,342	41	1				2		4	3	
Texas:											
Amarillo.....	15,494	5	1								
Beaumont.....	40,422	7								1	
Corpus Christi.....	10,522	3									
Dallas.....	158,976	36	2						4	2	
Fort Worth.....	106,482	25	2						1	1	
Galveston.....	44,255	11			1						
Houston.....	138,276	27	2				3			3	
San Angelo.....	10,050	24								14	
San Antonio.....	161,379	36	4		2		1			10	
Waco.....	38,500	3									
Utah:											
Provo.....	10,303	4									
Salt Lake City.....	118,110	22	2		2		2			1	
Vermont:											
Burlington.....	22,779	10									
Virginia:											
Alexandria.....	18,060	6			2						
Lynchburg.....	30,070	0							1		
Norfolk.....	115,777		2	1	2				2	2	
Petersburg.....	31,012	13	2		1		2			1	
Portsmouth.....	54,387	17	4				1				
Richmond.....	171,667	37	4		2		3		4	6	
Roanoke.....	50,842	8	5				1				

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Washington:										
Bellingham.....	25,585	.....	1	.....	.....	.....	2	.....	.....	.....
Seattle.....	315,312	.....	2	.....	2	.....	4	.....	18	.....
Spokane.....	104,437	.....	.....	.....	.....	.....	2	.....	.....	.....
Tacoma.....	96,965	.....	1	.....	.....	.....	8	.....	.....	.....
Yakima.....	18,539	.....	2	.....	2	.....	.....	.....	.....	.....
West Virginia:										
Bluefield.....	15,282	4	.....	.....	.....	.....	.....	.....	.....	.....
Charleston.....	39,608	.....	1	.....	2	.....	2	.....	1	1
Clarksburg.....	27,869	4	.....	.....	.....	.....	1	.....	.....	.....
Fairmont.....	17,851	.....	1	.....	.....	.....	.....	.....	.....	.....
Huntington.....	50,177	19	1	.....	.....	1	1	.....	.....	.....
Parkersburg.....	20,050	5	.....	.....	.....	.....	.....	.....	.....	.....
Wheeling.....	56,208	15	.....	.....	.....	.....	4	1	1	1
Wisconsin:										
Appleton.....	19,561	2	.....	.....	1	.....	.....	.....	.....	.....
Ashland.....	11,334	.....	.....	.....	.....	.....	1	.....	.....	.....
Beloit.....	21,284	6	1	.....	.....	.....	.....	.....	.....	.....
Eau Claire.....	20,906	.....	.....	.....	1	.....	1	.....	.....	.....
Fond du Lac.....	23,427	4	.....	.....	.....	.....	.....	.....	.....	.....
Green Bay.....	31,017	.....	3	.....	.....	.....	3	.....	.....	.....
Janesville.....	18,293	2	.....	.....	.....	.....	2	.....	.....	.....
Kenosha.....	40,472	5	1	.....	1	.....	1	.....	5	.....
Madison.....	38,378	6	.....	.....	.....	.....	.....	.....	1	1
Manitowoc.....	17,563	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette.....	13,610	.....	2	.....	.....	.....	.....	.....	.....	.....
Milwaukee.....	457,147	.....	17	2	2	.....	7	1	20	7
Oshkosh.....	33,162	8	.....	.....	1	.....	1	.....	.....	1
Racine.....	58,593	15	.....	.....	.....	.....	1	.....	3	.....
Sheboygan.....	30,955	8	2	.....	.....	.....	2	.....	.....	.....
Stevens Point.....	11,371	.....	.....	.....	.....	.....	1	.....	.....	.....
Superior.....	39,671	7	.....	.....	.....	.....	1	.....	.....	.....
Wausau.....	18,661	.....	1	.....	.....	.....	1	.....	.....	.....
West Allis.....	13,745	.....	.....	.....	.....	.....	1	.....	.....	.....

## FOREIGN AND INSULAR.

### BRAZIL.

#### Yellow Fever—Bahia.

A death from yellow fever was reported at Bahia, Brazil, during the week ended August 4, 1923.

### CHILE.

#### Influenza Epidemic—Typhus Fever—Valparaiso.

Under date of August 21, 1923, epidemic influenza was reported still prevalent at Valparaiso.<sup>1</sup>

During the week ended August 18, 82 cases of typhus fever were reported present in Valparaiso, with 17 deaths.

Unofficial estimates received under date of August 14, 1923, show approximately 60 cases of smallpox present at Valparaiso, Chile, on that date, and 200 cases of typhus fever in Valparaiso and vicinity.

#### Mortality—Concepcion—July, 1923.

During the month of July, 1923, 402 deaths (including 26 still births), of which 121 were in children under 1 year of age, were reported at Concepcion, Chile. Certain causes of death were stated as follows: Cancer, 5 deaths; croup, 4; influenza, 78; meningitis, 2; pneumonia, 109; bronchopneumonia, 24; smallpox, 1; tuberculosis, 22; typhoid fever, 1. (Population, officially estimated, 64,512.)

### CUBA.

#### Communicable Diseases.

Communicable diseases have been reported in Cuba as follows:

#### Habana.

	August 21-31, 1923.		Remaining under treatment Aug. 31, 1923.
	New cases.	Deaths.	
Chicken pox.....			2
Diphtheria.....	1		1
Leprosy.....	3		14
Malaria.....	45		41
Measles.....	3		0
Paratyphoid fever.....	2		3
Scarlet fever.....			1
Typhoid fever.....	18	1	20

<sup>1</sup> From abroad, 1.

<sup>2</sup> From the interior, 22.

<sup>3</sup> From the interior, 15.

<sup>1</sup> Public Health Reports, Sept. 7, 1923, p. 2105, and Sept. 14, 1923, p. 2188.

## Provinces.

Disease.	New cases reported July 11-20, 1923.							
	Chicken pox.	Diph- theria.	Infantile paralysis.	Malaria.	Measles.	Para- typhoid fever.	Scarlet fever.	Typhoid fever.
Camaguey.....		1		42				19
Habana.....	2	6		50	4			27
Matanzas.....	1					14	1	18
Oriente.....	12			50				35
Pinar del Rio.....			1	7		3		9
Santa Clara.....	1	3		2		2		12
Total.....	16	10	1	166	4	19	1	120

## ECUADOR.

## Plague—August 1-15, 1923.

During the period from August 1 to 15, 1923, plague was reported in Ecuador as follows: *Guamote*, country district, 9 cases with 2 deaths; *Santa Ana* (Manabi), 4 cases.

## Plague-Infected Rats—Guayaquil.

During the same period, out of 4,150 rats examined at Guayaquil, 8 rats were found plague infected.

## GREAT BRITAIN.

## Births and Deaths—England and Wales—April to June, 1923.

The following table has been prepared from figures given in Quarterly Return No. 298, issued by the Registrar General of England and Wales.<sup>1</sup>

The figures are provisional and subject to correction. The rates were calculated on an annual basis. The entire population was included in the computations for England and Wales, but civilians only in those for groups of towns.

Births registered during the quarter numbered 196,831, which was 3,719 less than for the second quarter of the year 1922. The deaths numbered 114,040, being 6,275 fewer than in the corresponding quarter of 1922.

## Birth and death rates, England and Wales, April to June, inclusive, 1923.

	England and Wales.	105 county boroughs and great towns.	157 smaller towns.
Birth rates per 1,000 population.....	20.7	21.4	20.5
Death rates per 1,000 population:			
All causes.....	12.0	11.9	11.1
Typhoid fever.....	.01	.01	.01
Measles.....	.20	.21	.33
Scarlet fever.....	.03	.04	.03
Whooping cough.....	.14	.17	.12
Diphtheria.....	.07	.09	.06
Influenza.....	.40	.42	.26
Death rates per 1,000 births:			
Diarrhea and enteritis (under 2 years).....	5.1	6.5	3.8
Total deaths under 1 year.....	66	69	65

Populations (estimated): England and Wales, 38,158,000; 105 county boroughs and great towns, 19,170,420; 157 smaller towns (20,000-50,000), 4,931,620.

<sup>1</sup> A table giving similar data for the four quarters of 1922 and the first quarter of 1923 will be found on page 1407 of Public Health Reports, vol. 38, No. 25, issued June 22, 1923.

**Smallpox—13 Weeks Ended June 30, 1923.**

During the 13 weeks ended June 30, 1923, 707 cases of smallpox were notified in England and Wales, including 249 cases in the county borough of Gloucester.

**Cases of Communicable Diseases Reported During the 13 Weeks Ended June 30, 1923, England and Wales.**

Diphtheria.....	9,277	Eruptive fever.....	533
Ophthalmia neonatorum.....	1,710	Scarlet fever.....	19,993
Pneumonia.....	14,313	Typhoid fever.....	601

**Case of Disease Declared not Typhus—Bootle.<sup>1</sup>**

According to information dated September 1, 1923, the case reported August 4, 1923, at Bootle, vicinity of Liverpool, England, to be typhus fever, has been officially declared not to be typhus.

**HAWAII.****Plague-Infected Rodent—Hamakua.**

A plague-infected rodent was reported found August 16, 1923, at Kapulena, Hamakua, Hawaii.

**JAMAICA.****Smallpox (Alastrim).**

During the two weeks ended August 18, 1923, 55 new cases of smallpox (reported as alastrim) were reported in the island of Jamaica. Of these, 6 cases were notified in the Parish of Kingston.

**Typhoid Fever—Kingston and Vicinity.**

During the week ended August 11, 1923, 12 cases of typhoid fever were reported at Kingston, Jamaica, and during the two weeks ended August 18, 1923, 25 cases were reported for the country in vicinity of Kingston.

**LATVIA.****Communicable Diseases—June, 1923.**

During the month of June, 1923, communicable diseases were reported in the Republic of Latvia as follows:

Disease.	Cases.	Remarks.
Cerebrospinal meningitis.....	3	
Diphtheria.....	55	
Malaria.....	7	
Measles.....	35	
Scarlet fever.....	147	
Typhoid fever.....	79	
Typhus fever.....	45	Paratyphus, 1 case.
Whooping cough.....	71	

<sup>1</sup> Public Health Reports, Aug. 24, 1923, p. 1934.

**Dysentery—Leprosy—Rabies.**

During the same period, eight cases of dysentery, eight cases of leprosy, and one case of rabies were reported in the Republic of Latvia.

**MADAGASCAR.****Plague—Tananarive Province.**

During the period June 16 to 30, 1923, a death from septicemic plague was reported in Tananarive Province, Madagascar.

**POLAND.****Communicable Diseases—May 27—June 16, 1923.**

During the period May 27 to June 16, 1923, communicable diseases were notified in Poland as follows:

*May 27—June 2, 1923.*

Disease.	Cases.	Deaths.	Districts showing greatest number of deaths.
Cerebrospinal meningitis.....	16	8	Lodz.
Diphtheria.....	75	2	Bialystok.
Measles.....	14	2	Volhynia.
Scarlet fever.....	199	20	Warsaw.
Smallpox.....	487	5	Kielce.
Tuberculosis.....	129	207	Lwow.
Typhoid fever.....	177	10	Kielce.
Typhus fever.....	256	13	Krakow.
Typhus fever, recurrent.....	17	.....	.....
Whooping cough.....	71	3	Warsaw.

*June 3-9, 1923.*

Cerebrospinal meningitis.....	10	7	Silesia.
Diphtheria.....	63	3	Warsaw.
Measles.....	27	.....	.....
Scarlet fever.....	288	29	Tarnopol.
Smallpox.....	378	10	Pomerania.
Tuberculosis.....	123	256	Lwow.
Typhoid fever.....	187	17	Lwow.
Typhus fever.....	223	18	Wilno.
Typhus fever, recurrent.....	31	.....	.....
Whooping cough.....	63	9	Bialystok.

*June 10-16, 1923.*

Cerebrospinal meningitis.....	13	10	Kielce; Lodz.
Diphtheria.....	74	8	Stanislawow.
Measles.....	509	9	Lodz; Tarnopol.
Scarlet fever.....	240	21	Lwow.
Smallpox.....	5	1	Kielce.
Tuberculosis.....	135	259	Lwow.
Typhoid fever.....	168	14	Lodz; Lwow.
Typhus fever.....	165	15	Lublin.
Typhus fever, recurrent.....	15	.....	.....
Whooping cough.....	161	8	Lwow; Tarnopol.

**Dysentery—Rabies.**

During the period under report, 102 cases of dysentery with 23 deaths and 2 deaths from rabies were reported in Poland.

**SIAM.****Smallpox—Bangkok.**

Smallpox was reported prevalent at Bangkok, Siam, September 8, 1923.

**UNION OF SOUTH AFRICA.****Smallpox—Typhus Fever—June, 1923.**

During the month of June, 1923, smallpox and typhus fever were reported in the Union of South Africa as follows: Smallpox—33 cases occurring among the colored population. Typhus fever—9 cases with 1 death occurring among the white population and 128 cases with 26 deaths occurring among the colored population. For distribution of occurrence according to locality, see page 2239.

**URUGUAY.****Influenza—Montevideo—July, 1923.**

Epidemic influenza was reported in Montevideo, Uruguay, during the month of July, 1923. The type of the disease was stated to be mild, and only a few deaths from the disease were reported.

**Revaccination Made Obligatory.**

According to information dated July 19, 1923, the Senate of Uruguay confirmed on July 3, 1923, the obligatory revaccination bill which requires obligatory revaccination every 10 years. The bill was stated to be an extension of the obligatory vaccination law previously in force.

**VIRGIN ISLANDS.****Disease Prevalence.**

Disease prevalence has been reported in the Virgin Islands of the United States as follows:

*June, 1923.*

Island and disease.	Cases.	Remarks.	Island and disease.	Cases.	Remarks.
St. Thomas and St. John:			St. Croix:		
Chancroid.....	1		Chicken pox.....	2	
Chicken pox.....	8		Dysentery.....	4	Entamable, 3; unclassified, 1.
Dengue.....	6				
Gonorrhea.....	5		Filariasis.....	10	Bancrofti.
Mumps.....	1		Fish poisoning.....	3	
Syphilis.....	2	1 imported.	Gonococcus infection.	2	
Tuberculosis.....	4	2 acute pulmonary.	Schistosomiasis.....	3	
Uncinariasis.....	1	Necator americanus.	Trachoma.....	15	
			Uncinariasis.....	1	Necator americanus.

July, 1923.

Island and disease.	Cases.	Remarks.	Island and disease.	Cases.	Remarks.
St. Thomas and St. John:			St. Croix:		
Chancroid.....	2	Imported.	Chancroid.....	1	
Dengue.....	7		Chicken pox.....	3	
Fish poisoning.....	14		Dysentery.....	1	Entamebic.
German measles.....	1		Fish poisoning.....	2	
Gonococcus infection.....	3	Imported.	Filariasis.....	4	Bancrofti.
Pellagra.....	1		Gonococcus infection.....	5	
Sprue.....	1		Syphilis.....	1	Secondary.
Syphilis.....	5	3 imported; 2 primary, 2 secondary.	Trachoma.....	14	
Tetanus.....	1				
Tuberculosis.....	3	2 chronic pulmonary; 1 acute pneumonia.			

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.**

The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

**Reports Received During Week Ended September 21, 1923.<sup>1</sup>****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Rangoon.....	July 15-21.....	1	1	
Indo-China:				
Saigon.....	June 21-30.....	1	1	Including 100 square kilometers of surrounding country.
Do.....	July 1-28.....	13	12	Do.
Siam:				
Bangkok.....	July 8-21.....	3	2	

**PLAGUE.**

Algeria:				
Algiers.....	Aug. 11-20.....	2	1	Actual dates of occurrence, Aug. 16 and Aug. 17, 1923.
China:				
Hongkong.....	July 22-28.....	4	10	
Ecuador:				
Guamote.....	Aug. 1-15.....	9	2	Country district.
Guayaquil.....				Aug. 1-15, 1923: 8 plague rats found.
Santa Ana (Manabi).....	Aug. 4-15.....	4		
Hawaii:				
Hamakua.....				Plague-infected rodent found, Aug. 16, at Kapuleua, Hamakua.
India:				
Karachi.....	July 29-Aug. 4....	1	1	
Madras Presidency.....	do.....	375	191	
Rangoon.....	July 15-21.....	40	40	
Indo-China:				
Saigon.....	June 24-30.....	5	5	Including 100 kilometers of surrounding country.
Do.....	July 1-7.....	1	1	Do.
Madagascar:				
Province—				
Tananarive.....	June 16-30.....	1	1	Septicemic.
Siam:				
Bangkok.....	July 8-21.....	2	1	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received During Week Ended September 21, 1923—Continued.**

## **SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Azores:				
St. Michael Island.....	July 15-21.....	7		Mild.
Brazil:				
Pernambuco.....	July 22-28.....	8	1	
Canada:				
British Columbia—				
Victoria.....	Aug. 19-25.....	1		
Chile:				
Concepcion.....				July 1-31, 1923: 1 death.
Valparaiso.....				Aug. 14, 1923: 60 cases reported present.
China:				Present.
Amoy.....	July 29-Aug. 4.....			Endemic.
Chungking.....	July 22-Aug. 4.....			
Hongkong.....	July 22-28.....	6	8	
Manchuria—				
Harbin.....	July 9-22.....	2		
Hungary:				
Budapest.....	July 22-Aug. 4.....	22		
India:				
Karachi.....	July 29-Aug. 4.....	4	1	
Madras.....	do.....	5		
Rangoon.....	July 15-21.....	3	1	
Indo-China:				
Saigon.....	June 24-30.....	6	3	Including 100 square kilometers in surrounding country.
Do.....	July 1-28.....	31	18	Do.
Jamaica.....				Aug. 6-18, 1923: Cases, 55.
Kingston.....	Aug. 6-18.....	6		Parish of Kingston.
Java:				
East Java—				
Soerabaya.....	July 15-21.....	19	2	
Mexico:				
Mexico City.....	July 22-Aug. 4.....	27		
Poland.....				May 27-June 16, 1923: Cases, 870; deaths, 16.
Portugal:				
Lisbon.....	Aug. 12-18.....	2		
Oporto.....	do.....	5	3	
Siam:				
Bangkok.....	July 8-21.....	42	23	Sept. 8, 1923: Reported prevalent.
Spain:				
Barcelona.....	July 26-Aug. 1.....		1	
Switzerland:				
Basel.....	Aug. 12-18.....	3		
Turkey:				
Constantinople.....	Aug. 1-7.....	1		
Union of South Africa.....				June 1-30, 1923: Cases, 33 (colored).
Cape Province.....	July 15-21.....			Outbreaks.
Orange Free State.....	do.....			Do.
Transvaal.....	do.....			Do.

## **TYPHUS FEVER.**

Algeria:				
Algiers.....	Aug. 11-20.....	1		
Chile:				
Concepcion.....	Aug. 7-13.....		1	82 cases stated to be present.
Valparaiso.....	Aug. 12-18.....		17	June 1-30, 1923: Cases, 45; paratyphus, 1 case.
Latvia:				Including municipalities in Federal district.
Mexico:				
Mexico City.....	July 22-Aug. 4.....	19		
Palestine:				
Jaffa.....	July 31-Aug. 6.....	1		
Poland.....				May 27-June 16, 1923: Cases, 614; deaths, 46. Recurrent typhus, cases, 63.
Turkey:				
Constantinople.....	July 25-Aug. 4.....	1		
Union of South Africa.....				June 1-30, 1923: Cases, 137; deaths, 27 (white, 9 cases, 1 death; colored, 128 cases, 26 deaths).
Cape Province.....	July 15-21.....			Outbreaks.
Orange Free State.....	do.....			Do.

## **YELLOW FEVER.**

Brazil:				
Bahia.....	July 29-Aug. 4.....		1	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923.<sup>1</sup>**

## **CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Shanghai.....	Aug. 25.....			Reported moderately prevalent.
India:				Apr. 15-June 30, 1923: Cases, 19,470; deaths, 14,608.
Bombay.....	June 3-30.....	34	23	
Do.....	July 1-21.....	9	8	
Calcutta.....	May 6-June 30.....	371	300	
Do.....	July 8-28.....	68	49	
Madras.....	June 3-30.....	2		
Do.....	July 1-7.....	1		
Rangoon.....	May 13-June 30.....	18	15	
Do.....	July 1-14.....	4	3	
Indo-China:				Oct. 1-31, 1922: Cases, 92; deaths, 53. Preceding month: Cases, 24; deaths, 14. October, 1921: Cases, 100; deaths, 61.
City—				Preceding month: Cases, 2; deaths, 1.
Saigon.....	May 20-June 9.....	11	10	Preceding month: Cases, 3.
Province—				Preceding month: Cases, 19; deaths, 13.
Annam.....	Oct. 1-31.....	68	39	Preceding month: No cases.
Cambodge.....	do.....	2	1	
Cochin-China.....	do.....	21	13	
Tenkin.....	do.....	1		
Iraq (Mesopotamia):				Present. Port declared infected since Aug. 6, 1923.
Bassorah.....	Aug. 21.....			
Philippine Islands:				
City—				Death in foreign case from Ching-kang, China.
Manila.....	June 10-16.....	2	1	
Province—				
Bulacan.....	May 17-23.....	1		
Capiz.....	May 27-June 2.....	1	1	
Cebu.....	Apr. 8-21.....	1	1	
Cotabato.....	Apr. 8-14.....	1	1	
Laguna.....	May 6-June 9.....	2	1	
Mountain.....	Mar. 25-31.....	1	1	
Pangasinan.....	June 24-30.....	2	2	
Russia (Soviet).....				Jan. 1-May 15, 1923: Cases, 10.
Siam:				
Bangkok.....	May 13-June 30.....	10	11	
Do.....	July 1-7.....	1		

## **PLAGUE.**

Algeria:				
St. Eugène.....	Aug. 1-20.....	2	2	Locality 5 miles north of Algiers.
Australia:				
Sydney.....	June 30.....	1	1	
Azores:				
St. Michael Island.....	May 6-26.....	12	5	In one locality.
Brazil:				Jan. 1-Mar. 31, 1923. Deaths, 19.
Porto Alegre.....				
British East Africa:				
Kenya—				
Kisumu.....	June 10-16.....	2	1	
Tanganyika.....	May 6-June 2.....	3	3	Territory.
Uganda.....	Apr. 1-30.....	7	5	
Canary Islands:				
Las Palmas.....	June 7.....	1		
Ceylon:				
Colombo.....	May 6-June 30.....	18	19	Plague rats, 38.
Do.....	July 1-28.....	21	19	Plague rats, 14.
China:				
Amoy.....	May 13-June 25.....		10	
Do.....	July 1-28.....		6	
Foochow.....	May 27-June 23.....			Present.
Do.....	July 8-28.....			Reported as epidemic.
Hongkong.....	Apr. 29-June 30.....	63	40	
Do.....	July 1-21.....	19	18	
Manchuria—				
Yakoshih.....	May 31.....	1	1	Station on Eastern Chinese Railway. Occurring in tarabagan (marmot) hunter. Bubonic. Rodent plague present.
Nanking.....	June 17-30.....			Do.
Do.....	July 1-Aug. 4.....			

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923—Continued.**

## **PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Ecuador:</b>				
Guayaquil.....	July 1-15.....	2	2	May 16-June 30, 1923: Rats examined, 13,800; found infected, 39. July 1-31, 1923: Rats examined, 9,300, found infected, 15.
Do.....	July 16-31.....	3	3	
Santa Ana (Manabí).....				
<b>Egypt.....</b>				Jan. 1-June 21, 1923: Cases, 1,051; deaths, 548. May 1-29: Cases, 345. Jan. 1-June 24, 1923: Cases, 1,039. Jan. 1-Aug. 2, 1923: Cases, 1,279; deaths, 630. July 23-29, 1923: Cases, 47.
<b>City—</b>				May 1-29, 1923: Cases, 14.
Alexandria.....	Jan. 7-June 24.....	35	15	
Do.....	July 1-22.....	5		
Port Said.....	Jan. 7-June 24.....	24	12	May 1-29, 1923: Cases, 13.
Do.....	July 1-29.....	17		
Suez.....	Mar. 2-June 15.....	12	7	May 1-29, 1923: Cases, 3.
Do.....	July 16-22.....	1		
<b>Province—</b>				Deaths not reported.
Assiout.....	May 1-29.....	64		
Benisouef.....	do.....	7		Do.
Fayoum.....	do.....	14		Do.
Garbieh.....	do.....	2		Do.
Geizeh.....	do.....	3		Do.
Girgeh.....	do.....	123		Do.
Keneh.....	do.....	22		Do.
Menoufieh.....	do.....	34		Do.
Minieh.....	do.....	46		Do.
<b>Hawaii:</b>				
Hamakua.....				Plague-infected rats: Pohakea, May 23, 1923, 1 rat; vicinity of Pacific Sugar Co. mill, June 2, 1 rat; Aug. 2, 1 rat at Hamakua Mill Co. plantation.
Honokaa.....				July 20, 1923: One plague rat; July 30, 2 plague rats: Honokaa Sugar Co. mill and Honokaa village.
<b>India.....</b>				Apr. 19-June 23, 1923: Cases 5,783; deaths, 4,481.
Bombay.....	Apr. 19-June 30.....	503	411	
Do.....	July 1-21.....	11	10	
Calcutta.....	May 6-June 9.....	13	13	
Karachi.....	May 13-June 30.....	110	85	Plague rats, 5.
Do.....	July 1-28.....	40	36	
Madras Presidency.....	May 13-June 30.....	254	141	
Do.....	July 1-28.....	166	103	
Rangoon.....	May 6-June 30.....	260	229	
Do.....	July 1-28.....	102	81	
<b>Indo-China.....</b>				Oct. 1-31, 1922: Cases, 93; deaths, 89. Preceding month: 70 cases; 65 deaths.
<b>Province—</b>				
Annam.....	Oct. 1-31.....	15	14	Preceding month, 15 deaths.
Cambodge.....	do.....	75	75	Preceding month, 51 deaths.
Cochin China.....	do.....	3		Preceding month, 4 cases, 2 deaths.
<b>Iraq (Mesopotamia):</b>				
Bagdad.....	May 1-June 30.....	335	224	
<b>Java.....</b>				May 1-June 30, 1923: Deaths, 912.
<b>Province—</b>				
Djakakarta.....	June 1-30.....		5	
Kedoe.....	do.....		135	
Pekalongan.....	do.....		48	
Samarang.....	do.....		143	
Soerabaya.....	do.....		1	
Soerakarta.....	do.....		109	May 16, 1923: Epidemic in 5 districts.
<b>Madagascar.....</b>				Apr. 1-June 15, 1923: Cases, 74; deaths, 71. Bubonic, pneumonic, septicemic.
<b>Province—</b>				
Tananarive.....	Apr. 1-June 15.....	56	53	
Tananarive.....	Apr. 16-June 15.....	20	20	
<b>Mauritius Island.....</b>				May 4-21, 1923: 2 cases.
Port Louis.....	May 4.....	1		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923—Continued.**

## **PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Tampico.....				Apr. 15-21, 1923: 1 plague rat. Aug. 8, 1923: At Dona Cecelia, a suburb of Tampico, 1 plague-infected rat found. From Jan. 1 to Aug. 8, 1923, plague-infected rats found, 5.
Palestine:				
Jaffa.....	June 19-July 16...	10	1	Bubonic and septicemic.
Peru:				May 1-June 30, 1923: Cases, 111; deaths, 68. July 1-31, 1923: Cases, 23; deaths, 12.
Locality—				
Ayabaca.....	May 16-June 30...	15	13	
Do.....	July 1-31.....	4	2	
Callao.....	May 1-June 30...	5	3	
Do.....	July 1-31.....	1	1	
Canete.....	May 16-June 30...	3	2	
Do.....	July 1-31.....	6	3	
Cerro Azul.....	May 1-31.....	3	1	
Chiclayo.....	May 1-June 30...	9	2	
Do.....	July 1-31.....	5	3	
Cutervo.....	May 1-15.....	2	1	
Huancabamba.....	May 1-June 30...	34	25	
Huacho.....	July 1-31.....	1		
Huamal.....	June 1-30.....	2	2	
Do.....	July 1-31.....	3	1	
Lima (city).....	May 1-31.....	17	8	
Do.....	July 1-31.....	2	1	
Lima (country).....	May 1-31.....	7	4	
Do.....	July 1-31.....	1	1	
Mollendo.....	June 1-30.....	1	1	
Salaverry.....	May 1-June 30...	11	3	
Trujillo.....	do.....	2	3	
Russia.....				Jan. 1-May 15, 1923: Few cases in Far East regions.
Senegal:				
Dakar.....	July 1-31.....	4	4	Reported to have come from port of Rufisque, Senegal.
Rufisque.....	Aug. 6.....			Present.
Siam:				
Bangkok.....	Apr. 29-June 30...	31	30	
Do.....	July 1-7.....	3	3	
Siberia:				Sporadic cases of plague reported yearly in localities vicinity of stations Matsievskaya and Borzina, Transbaikai Railway.
Haramhor.....	May 6.....	1	1	Village in zone of endemic tarabagan (marmot) plague, Transbaikai region.
Station No. 83.....				Station on Transbaikai Railway. Marmot plague during recent years.
Soktu.....				Do.
Straits Settlements:				
Singapore.....	May 6-June 30...	6	8	
Syria:				
Beirut.....	May 12-June 20...	3		
Do.....	July 1-10.....	2		

## **SMALLPOX.**

Algeria:				
Algiers.....	May 1-31.....	2		
Do.....	Aug. 1-10.....	1		
Arabia:				
Aden.....	May 27-June 2.....		2	
Do.....	July 8-Aug. 11....	7	1	
Bolivia:				
La Paz.....	Apr. 1-June 30....	2	3	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Pernambuco.....	May 6-June 16.....	5		
Do.....	July 1-7.....	8		
Rio de Janeiro.....	May 13-June 23.....	25	3	
Do.....	July 15-Aug. 4.....	8		
Rio Grande do Sul.....				Jan. 1-Mar. 31, 1923: Present with some mortality.
British East Africa:				
Kenya—				
Mombasa.....	May 20-26.....	1		From vessel from Bombay.
Tanganyika.....	Apr. 29-June 9.....	3		Territory.
Uganda—				
Entebe.....	Apr. 1-30.....	4		
Canada:				
Alberta—				
Calgary.....	May 27-June 2.....	1		Infection from Deer Lodge, Mont.
British Columbia—				
Vancouver.....	May 27-June 30.....	33	1	
Do.....	July 1-14.....	5	1	
Victoria.....	Aug. 5-11.....	1		
Manitoba—				
Winnipeg.....	June 3-30.....	1		
Do.....	July 1-31.....	1		
New Brunswick—				
Kent County.....	July 1-7.....	1		
Ontario.....				June 1-30, 1923: Cases, 13. July 1-Aug. 31, 1923: Cases, 23.
London.....	July 15-21.....	1		
Toronto.....	June 24-30.....	3		
Do.....	July 15-21.....	1		
Quebec—				
Quebec.....	June 10-16.....	1		Varioloid.
Saskatchewan—				
Moose Jaw.....	July 8-14.....	1		
Regina.....	June 24-30.....	3		
Ceylon:				
Colombo.....	May 6-June 2.....	23	1	
Chile:				
Concepcion.....	May 22-June 11.....		3	June 1-30, 1923: Cases, 2.
Valparaiso.....	May 7-June 23.....	6	121	June 10-16, 1923: 29 cases reported from 2 districts.
Do.....	July 1-28.....	12	10	July 30: 25 cases in lazaretto. Aug. 6: 20 cases.
China:				
Amoy.....	May 13-June 23.....		3	June 19-25, 1923. Present.
Do.....	July 1-28.....			Present.
Antung.....	May 14-20.....	1		
Chungking.....	May 13-June 30.....			Present and endemic.
Do.....	July 1-21.....			Do.
Foochow.....	May 13-July 28.....			Do.
Hongkong.....	Apr. 29-June 30.....	98	82	
Do.....	July 1-21.....	31	34	
Manchuria—				
Dairen.....	May 21-27.....	1		
Harbin.....	May 7-June 24.....	5		
Do.....	July 1-7.....	1		
Mukden.....	May 13-20.....	1		
Nanking.....	May 13-June 23.....			Present.
Do.....	June 24-Aug. 4.....			Do.
Shanghai.....	May 21-June 3.....	4		Foreign.
Do.....	July 2-Aug. 5.....	1	3	Case, foreign; deaths, Chinese.
Chosen (Korea):				
Chemulpo.....	May 1-31.....	1		
Fusan.....	May 1-June 30.....	4		
Gensan.....	May 1-31.....	1		
Seoul.....	May 1-June 30.....	42	13	
Cuba:				
Antilla.....	July 8-14.....		2	From Preston.
Czechoslovakia.				Jan.-Mar., 1923: Cases, 15; April-June, 1923: Cases, 16; deaths, 4.
Province—				
Bohemia.....	Jan. 1-Mar. 31.....	15	4	
Ecuador:				
Alausi.....	July 16-31.....	3		
Guayaquil.....	May 16-31.....	1		
Egypt:				
Cairo.....	Mar. 12-May 6.....	17	4	

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 30 to September 14, 1923—Continued.

## SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Estonia.....	June 1-30.....	4		
Finland.....				May 1-15, 1923: 1 case.
Great Britain:				
Birmingham.....	June 18-30.....	3		
Bristol.....	June 28.....			Present.
Cardiff.....	June 3-30.....	6		
Gloucester.....	June 28.....			123 cases reported in hospital; present in rural districts. July 15, 1923: Present. Aug. 9, 1923: 33 cases in isolation hospital; two weeks previously about 250 cases present in hospital.
Do.....	July 12.....	19		May 1-31, 1923: Cases, 211.
Nottingham.....	June 3-9.....	1		
Do.....	July 8-21.....	2		
Greece:				
Athens.....	May 1-31.....	53		
Patras.....	Apr. 24-June 15.....		19	
Saloniki.....	Apr. 30-May 20.....	2	2	
Do.....	June 25-July 8.....	2	3	
Guadeloupe (West Indies).....	July 22-Aug. 4.....			Present in epidemic form. (Re- ported as alastrim.) Aug. 17, 1923: Stated to be officially de- clared present.
Basse Terre.....	Aug. 17.....			Present.
Pointe à Pitre.....	do.....			Estimated from 2,000 to 3,000 cases.
Hungary.....	July 15-21.....	6		
India:				Apr. 15-June 30, 1923: Cases, 8,112; deaths, 2,933.
Bombay.....	Apr. 22-June 30.....	298	141	
Do.....	July 1-21.....	40	22	
Calcutta.....	May 13-June 9.....	12	9	
Do.....	July 1-14.....	10	10	
Karachi.....	May 13-June 30.....	24	8	
Do.....	July 1-21.....	7	1	
Madras.....	May 13-June 23.....	91	16	
Do.....	July 8-28.....	14	7	
Rangoon.....	May 6-June 30.....	125	67	
Do.....	July 1-28.....	25	10	
Indo-China:				
Saigon.....	May 20-June 23.....	28	20	Including 100 surrounding square kilometers.
Iraq (Mesopotamia):				
Bagdad.....	Apr. 1-June 30.....	32	11	
Italy:				
Turin.....	May 28-June 3.....	1		
Do.....	July 2-15.....	2		
Jamaica.....				May 27-June 30, 1923: Cases, 236. July 1-Aug. 4, 1923: Cases, 139. (Reported as alastrim).
Kingston.....	May 27-June 30.....	39		
Do.....	July 1-Aug. 4.....	27		
Japan:				
Kobe.....	May 28-June 10.....	2		
Do.....	July 2-8.....	1		
Java:				
East Java—				
Soerabaya.....	Apr. 22-June 30.....	187	22	
West Java—				
Batavia.....	May 5-June 8.....	17	3	Province.
Do.....	June 30-July 20.....		1	
Latvia.....				Apr. 1-May 31, 1923: Cases, 8.
Mexico:				
Aguascalientes.....	July 8-14.....		1	
Chihuahua.....	June 11-24.....	7		
Guadalajara.....	July 22-Aug. 25.....		8	June 1-30, 1923: Cases, 15; deaths, 2.
Mexico City.....	May 19-June 30.....	164		Including municipalities in Fed- eral district.
Do.....	July 1-21.....	84		
Palestine:				
Jaffa.....	June 5-11.....	1		
Persia:				
Tabriz.....	Apr. 1-June 30.....		2	District.
Teheran.....	Feb. 22-June 14.....		30	
Poland.....				Apr. 29-May 26, 1923: Cases, 965; deaths, 25.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Lisbon.....	May 20-June 30...	35	3	
Do.....	July 1-Aug. 11...	28	2	
Oporto.....	June 10-30.....	6	3	
Do.....	July 9-Aug. 11.....	22	12	
Portuguese West Africa:				
Angola—				
Loanda.....	Apr. 1-21.....		2	
Rhodesia (British Africa):				
Northern Rhodesia.....	May 8-14.....	21	8	
Southern Rhodesia.....	May 3-16.....	4	2	
Siam:				
Bangkok.....	Apr. 20-June 30.....	90	53	
Do.....	July 1-7.....	9	4	
Sierra Leone:				
Kaballa.....	May 1-15.....	1		
Pujehun.....	May 16-31.....	1		In Sembehun district.
Spain:				
Barcelona.....	May 31-June 6.....		1	
Do.....	June 28-July 10.....		2	
Seville.....	July 19-25.....		1	
Valencia.....	May 15-June 30.....	44	2	
Do.....	July 1-Aug. 18.....	36	4	
Switzerland:				
Basel.....	May 27-June 30.....	4		
Do.....	July 8-14.....	1		
Berne.....	May 20-June 30.....	11		
Do.....	July 1-28.....	10		
Lucerne.....	May 1-June 7.....	36		
Do.....	July 1-31.....	14		
Zurich.....	May 20-June 23.....	10		
Do.....	July 15-21.....	6		
Syria:				
Aleppo.....	do.....	6		
Damascus.....	May 15-June 11.....	7		
Tunis:				
Bizerta.....	June 10-20.....	1		
Tunis.....	June 11-17.....	1		
Do.....	June 26-July 1.....	1		
Turkey:				
Constantinople.....	May 13-June 26.....		45	
Do.....	June 27-July 21.....		10	
Union of South Africa.....				May 1-31, 1923: Cases, 33; deaths, 1 (colored).
Cape Province.....				May 1-31, 1923: Cases, 32 (colored).
Do.....	May 6-June 30.....			Outbreaks.
Do.....	July 1-14.....			Do.
East London.....	July 8-14.....	1		
Natal.....	July 8-14.....			Outbreaks.
Orange Free State.....	Apr. 29-June 30.....			Do.
Do.....	July 1-14.....			Do.
Transvaal.....				May 1-31, 1923: 1 case.
Yugoslavia.....				July 1-7, 1923: Cases, 8; deaths, 1.
Province—				
Bosnia-Herzegovina.....	July 1-7.....	1		
Croatia-Slavonia.....	do.....	4	1	
Serbia.....	do.....	2	1	
Belgrade.....	June 10-16.....	1	1	
Do.....	July 8-14.....		1	
Zagreb.....	June 24-30.....	1		
Wolwodina.....	July 1-7.....	1		
On vessels:				
S. S. Kargala.....	May 20-26.....	1		At Mombasa, British East Africa. Vessel arrived from Bombay Mar. 25, 1921.
S. S. Makura.....	May 26.....	2		Two cases in quarantine (reported as alastrim). Vessel left Victoria, B. C., Apr. 28, 1923. Touched at Honolulu.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923—Continued.**

## **TYPHUS FEVER.**

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	May 1-June 30....	66	19	
Argentina:				
Rosario.....	May 25-31.....		3	
Bolivia:				
La Paz.....	June 1-30.....	4		
Bulgaria:				
Sofia.....	Apr. 22-June 23....	11	2	Paratyphus, 2 cases, 2 deaths.
Do.....	July 15-Aug. 11....	15	1	
Chile:				
Concepcion.....	May 22-June 18....		3	
Talcahuano.....	May 13-19.....	1		
Valparaiso.....	May 7-June 23....		26	June 11, 1923: 34 cases in Salvador Hospital. July 30: 45 cases in hospital. Aug. 6: 58 cases.
Do.....	July 1-Aug. 4.....		20	
China:				
Antung.....	May 28-June 24....	12		
Do.....	July 16-22.....	1		
Hankow.....	May 19-25.....	1		
Manchuria—				
Harbin.....	May 6-13.....	1		
Mukden.....	May 14-20.....	2		
Czechoslovakia:				
Provinces—				
Bohemia.....	Apr. 1-June 30....	8		Jan.-Mar., 1923: Cases, 191; deaths, 6. Apr. 1-June 30, 1923: Cases, 132; deaths, 4. Paratyphoid A, 1; paratyphoid B, 20.
Moravia.....	do.....	2		
Russia.....	do.....	98	1	
Silesia.....	do.....	1	1	
Slovakia.....	do.....	23	2	
Estonia.....	do.....			June 1-30, 1923: Recurrent typhus, 1 case; paratyphus, 2 cases.
Egypt:				
Alexandria.....	May 14-June 24....	7	5	
Do.....	June 25-July 29....	5	3	
Cairo.....	Apr. 12-May 6.....	20	10	
France:				
Marseille.....	Mar. 1-May 31.....		3	
Germany:				
Coblenz.....	May 27-June 2.....		1	
Hamburg.....	May 29-26.....	3		
Do.....	July 29-Aug. 4.....	1		Case developed July 28, 1923, at Emigration Hall, Hamburg.
Königsberg.....	May 13-June 2.....	2		
Stettin.....	May 27-June 9.....	1	1	
Great Britain:				
Bootle <sup>1</sup> .....	Aug. 4.....	1		Vicinity of Liverpool.
Greece:				
Athens.....	May 1-31.....	150	5	May 1-31, 1923: Cases, 876.
Do.....	July 22-31.....		1	
Patras.....	Apr. 24-June 15....		30	
Piræus.....	May 1-June 30....	356	11	
Do.....	July 1-10.....	3		
Saloniki.....	Apr. 30-June 24....	56	16	Apr. 30-May 27, 1923: Recurrent typhus: Cases, 3; deaths, 3.
Do.....	July 9-15.....	1		
Guatemala:				
Guatemala City.....	Apr. 1-June 30....		5	
Hungary:				
Budapest.....	Jan. 1-June 2.....	48	12	Jan. 1-May 19, 1923: Cases, 318; deaths, 39. In 11 counties.
Iraq (Mesopotamia):				
Bagdad.....	Apr. 1-June 30....	3		
Japan:				
Nagasaki.....	July 2-8.....	1		
Latvia:				
				Apr. 1-May 31, 1923: Cases, 186. Paratyphus, 4 cases.
Mexico:				
Mexico City.....	May 20-June 30....	75		Including municipalities in Federal District.
Do.....	July 1-21.....	27		
Guadalajara.....	June 1-30.....	1		
San Luis Potosi.....	July 29-Aug. 4.....		1	
Do.....	July 1-31.....	1		

<sup>1</sup> Officially declared not typhus fever, according to information dated September 1, 1923.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from June 30 to September 14, 1923—Continued.**

## **TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Palestine:				
Jaffa.....	May 22-28.....	2		
Do.....	June 26-July 9....	4		Relapsing fever, 1 case.
Jerusalem.....	May 22-28.....	1		
Persia:				
Tabriz.....	Apr. 1-14.....	2		
Teheran.....	Feb. 22-June 14....		4	
Poland.....				Mar. 4-Apr. 7, 1923: Cases, 2,253; deaths, 172. Recurrent typhus: Cases, 338, deaths, 6. Apr. 29-May 26, 1923: Cases, 1,305; deaths, 111. Recurrent typhus: Cases, 239; deaths, 2.
Portugal:				
Oporto.....	June 10-16.....	1		
Do.....	July 1-21.....	3		
Rumania:				
Kishineff.....	May 1-June 30....	41		
Russia:				
European Russia and autonomous republics.	Jan. 1-Apr. 30....	93,999		Jan. 1-Apr. 30, 1923: Cases, 106,854. (Corresponding period 1922: Cases, 847,516.) Feb. 1-28, 1923: Cases, 17,577. Recurrent, Jan. 1-Feb. 28, 1923: Cases, 43,540.
Siberia, Caucasus, and Central Asia.	.....do.....	9,921		
Waterways and railways.....	.....do.....	2,934		
Spain:				
Barcelona.....	June 21-27.....		1	
Madrid.....	May 1-31.....		1	
Syria:				
Aleppo.....	May 20-June 16....	4	2	
Do.....	July 15-21.....	3	1	July 8-14, 1923: Present.
Beirut.....	May 1-10.....	1		
Tunis:				
Tunis.....	May 28-June 24....	3	2	
Do.....	July 9-15.....	1	1	
Turkey:				
Constantinople.....	May 13-June 26....		19	
Do.....	June 27-July 3....		1	
Union of South Africa.....				May 1-31, 1923: Cases, 102; deaths, 21 (colored). White—Cases, 6. Total, 108 cases, 21 deaths.
Cape Province.....				May 1-31, 1923: Cases, 49 (colored) white, 5. Outbreaks.
Do.....	Apr. 29-June 30....			Do.
Do.....	July 1-7.....			May 1-31, 1923: One case (colored).
Natal.....				May 1-31, 1923: Cases, 45 (colored).
Orange Free State.....				Outbreaks.
Do.....	May 6-June 16....			May 1-31, 1923: Cases, 7.
Transvaal:				
Johannesburg.....	May -June 30....	4	4	July 1-7, 1923: Cases, 4.
Yugoslavia:				
Province—				
Bosnia-Herzegovina.....	July 1-7.....	4		
Croatia—				
Zagreb.....	May 27-June 2....	1		

## **YELLOW FEVER.**

Brazil:				
Bahia.....	May 13-June 30....	25	6	
Do.....	July 1-28.....	9	2	
Colombia:				
Bucaramanga.....	June 25-July 29....			Present.